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BALTIMORE, MAY 12, 1899.

At the last meeting of the Commercial Club of Birmingham it was announced that correspondence had been had with a Chicago wagon factory, from a Freeport (Ill.) firm which manufactures windmills, tanks, pumps and grinding mills, a Pittsburg firm to manufacture a hoop and cotton-tie mill, a Chicago firm to manufacture high-grade engines, a Decatur (Ill.) firm to make carpet-cleaning machines, who desire sites in the South. These are indications at a single point of the effect of the establishment of great industries in the South as an encouragement of the growth of kindred smaller industries about them.

The reorganization committee of the North Carolina Agricultural and Mechanical College has determined to establish a textile department in the institution, and it is announced that there are bright prospects for the establishment of a thoroughly modern textile school in connection with the college. In arranging for such a department as a feature of the department of civil engineering, the authorities of the college are doing much to make certain the founding of a school which is much needed in North Carolina, and which, it is recognized, will do much toward increasing the efficiency of that State as a cotton manufacturer. The friends of the movement have apparently not been discouraged by the failure of the legislature to make the desired provision for it, and it is hoped that by the next meeting of the lawmakers such a beginning shall have been made as to make it imperative upon them to give it State support.

On another page of this week's Manufacturers' Record is a suggestive article by Mr. Courtenay De Kalb, a well-known consulting engineer of New York, on the advantages of New Orleans as a site for the smelting industry. From the fact that wherever a great seaboard city has grown up, with fuel easily accessible, an important smelting industry has arisen, he argues that New Orleans, with its tremendous advantages as a distributing point for the Mississippi valley, with its easy accessibility to high-grade coals and coke, and to the sources of copper, tin and lead in Mexico, Colombia, Cuba and other Central American countries, and to Peru and Chili

when the Nicaraguan canal shall be opened, is an ideal location for the smelting of ores which shall be brought largely as ballast by vessels coming to New Orleans to be laden with agricultural products and manufactures for export. The article is an interesting one, and its writer is inspired by interest in the section to which he belongs by birth and education.

Business Men Aroused.

Advocates of drastic and short-sighted anti-trust legislation in some Southern States are not having an absolutely unimpeded career. The extremes perpetrated by the Arkansas legislature and under consideration by that of Texas have set men to thinking not only about trusts, but about the necessity for care in the choice of lawmakers. An able summary of conservative sentiment on the latter point is set forth in an address to the people of Arkansas, prepared by Mr. J. A. Woodson, president of the State Board of Trade, and adopted by that body. The address points out that for the successful solution of problems relating to the material development of the State, the co-operation and fostering care of the business men are needed. Great systems of railways and local lines are needed, it says, and they should be welcome. The rivers are to be improved, and public buildings of modern character erected, while steps should be taken to invite investors to the State and to protect them in developing its natural resources. As preliminary to the work to be done in this direction the address says:

The experience of the past records the fact that the business people of the State, and when I say business people I mean farmers as well as merchants, professional men and mechanics, have not always exerted themselves as they should in building up our State; have not realized the necessity that they should take an active interest in the very life of their State; that it is their duty to take an active part in pushing the State to the front, and especially in selecting those who come to the halls of legislation and who make our laws, the inviting or the repelling force so far as capital is concerned. We have seen the result of this indifference in the passage of laws very damaging to our commercial interests, and the failure of measures almost absolutely necessary to our prosperity.

Our natural resources are second to none in the United States, a matter in which every county is interested, and all that is needed for their development is more capital. This we can obtain if we will only hold out to investors such inducements as will guarantee to them liberal and equitable treatment at the hands of our lawmaking power.

The Arkansas State Board of Trade, which is a non-political organization, proposes to unite the business men of Arkansas in a solid compact body, having in view the education of the masses of the people on all subjects in which they are vitally interested, thereby securing as lawmakers the very best material in the State. Unity of action will place such men in the lead as well as correct errors of the past, and future legislation will be of that conservative, enlightened and broad-gauge character as will bring the State to the proud position of prominence to which she is so justly entitled.

There is no doubt that the words of this address voice the opinion of all

conservative men of the South. They realize that for the good of their section the power of creative capital is necessary to supplement the natural wealth of the South. They also know that such assistance cannot be obtained in its fulness unless the State or the community guarantees its safety. To ensure this men must be elected to public office who will be more interested in the welfare of their constituents than in their own enjoyment of official salaries. Such men will not be chosen if representatives of the stability and progress of the South are content to confine their efforts in behalf of wise legislation to criticism of candidates after they have been elected to office. They must take an active, personal part in the preliminary movements which result in nominations to office, thus making it certain that the right sort of men will be chosen. If such shall be the result of the anti-trust agitation in the South that section will be ultimately benefited instead of being hampered, as now seems threatened.

Building Up Cities.

An investigation made at the suggestion of Mr. J. C. Van Pelt, secretary of the Commercial Club of Louisville, has discovered the fact that since the passage on March 16, 1898, of an ordinance exempting new factories from taxation for five years twenty-five new industries, employing from fifty to 150 men, have been started in that city. Among the industries are three clothing factories, one bagging factory, one foundry, two stove works, two sugar factories, two machine works, one rope factory, three tobacco factories, one wagon factory, two carriage and wood-ware factories, one oil mill, one soap factory, one ice factory, one lumber and barrel mill, one harness factory and one chair factory. The passage of the ordinance was largely the result of the exertions of the Commercial Club, and it is so gratified at the success of the measure that new plans will be devised for making the exemption feature more widely known.

The number of such organizations in Southern cities is increasing, and with their increase and the adoption by them of such practical methods as that of the Commercial Club of Louisville, the industrial energies of the South may be expected to advance in just the direction needed. The growth of large industries concerned in the primary handling of iron, cotton, lumber in that section cannot be prevented except by unwise legislation or the manifestation of a spirit hostile to capital. The full advantage of such a growth, however, can only be enjoyed through the up-building of other undertakings for finishing products dependent upon united efforts on the part of the aggressive and progressive men of different communities.

The boards of trade, commercial clubs and business leagues of one kind and another, in smoothing the way for

the movement to their respective cities of minor industries, are not only increasing the substantial population of the cities, but are enlarging the markets for nearby agriculture. They are presenting striking lessons of the intimate relations between the town and the country and laying the foundation for the healthy future of the South in diversified farming and manufacturing.

No Room for Rivalries.

Commenting upon the large share of over-sea trade obtained by Galveston as one of the leading cotton ports of the Southwest, the Age of Steel says:

It is but one of the several that are on the list that ultimately, with varied and special lines of advantage, will be points of deployment of American trade in and beyond the Gulf. Rival claims will come along, as usual, but facts and figures without carmine flames must, in the long run, settle the matter. There is, or will be, room for all, and petty differences or local jealousies that in the earliest stages of competition are more or less excusable and natural will never be more than eruptions on the epidermis of the situation.

It must be confessed that heretofore some of the Gulf ports have given at times more attention to the preservation of their epidermis than to the building up of arteries which will give such strength that the condition of the skin will be of no great moment. These ports have had time and again to heed warnings of the danger of wasting energies in rivalries among each other, and they are beginning to show that they have learned well from other groups of ports the lesson that in this age of competition for the export of products from the agricultural sections and other materials they cannot afford to waste their time in jeering at each other's pretensions or achievements. Every Gulf port has about all it can attend to in looking after its own interests, without regard to what another port may be doing in the same direction, though it should find time to unite with its neighbors in protective measures against efforts of other groups to divert by artificial means business which naturally would gravitate to it.

North Carolina's Chances.

A vigorous agitation is being carried on by the News and Observer of Raleigh for the promotion of industrial life in North Carolina. It takes the ground that in view of the drift of manufacturing enterprises southward and the promise of that section's becoming the seat of the textile industry in this country, it ought not to be difficult for North Carolina towns to secure capital to develop their natural opportunities. But it insists that each community must work out its own salvation by having faith in itself. It says:

Every town in the State ought to devote its energies to increasing its manufacturing interests. Towns cannot grow by swapping calico and sugar for cotton and tobacco. The town that goes forward must make something to sell abroad. There are many small towns that feel the need of new industries, but cannot secure the capital to

build on a large enough scale to make it profitable. Here is a plan that has succeeded elsewhere—it will succeed wherever tried. In a village of ten years ago the people wanted to build a cotton factory, but after raising all the money possible they found that they could get only \$40,000, and they needed \$100,000. Did they stop work because they could not in themselves subscribe the desired sum? Not at all. They put their \$40,000 in the bank, organized their company, and sent their best business men to a large city to sell \$60,000 worth of 6 per cent. bonds. They brought par and they were easily sold, too. The men who bought the bonds were investors in securities. They held money in trust, and while they were not warranted in taking stock, they were glad to invest in the bonds. The people of the village built their \$100,000 factory, it paid them 10 per cent., the bondholders were delighted to get 4 per cent. and the impetus given to the village caused other industries to spring up, and it began to grow until now it is a large town and has two cotton factories and its population has doubled.

These facts are in line with the long-time contention of the Manufacturers' Record, and with the generally demonstrated principle that outside capital helps them who help themselves. It may be suggested, however, that the efforts in North Carolina need not be confined to advancing the textile interests. There are all sorts of other industries, great and small, which may be brought to a flourishing condition in that State. They will be furthered just as certainly as the people back up investments of their own by insuring equal security to investments made by outsiders.

New England Revival.

The plant of a Massachusetts mill, which makes the finest grades of cotton goods, such as satines, organdies or lawns, is to be reinforced by the erection of an additional building to contain 100,000 spindles. Commenting on this the Boston Journal of Commerce says:

This plant * * * is in a line of work from which no competition is to be feared from the South, at least for a long time to come, and if it ever should come, labor conditions will have so changed in the South as to make it doubtful if a successful competition could be maintained with an entirely new mill like the Berkshire on a line of fine goods where skilled labor enters so largely and which is such a prominent factor in obtaining successful results. In this line of fine work the mills of New England will hold their own against any competition, even that of the foreign manufacturer, and some of the products of our looms are now unequalled by the best foreign importations.

It is gratifying to know that returning prosperity is enabling New Englanders to accept the inevitable result of the superior facilities of the South for basic cotton manufacturing. It is, perhaps, taking too much for granted to expect that the South will never be able to compete with New England in the manufacture of fine stuffs. Never is a very long time. The word has been used frequently before, but subsequent events have proved its limitations. There is no reason, therefore, to believe that what the South has already accomplished in some lines, in spite of dire prophecies, it cannot accomplish in other lines. New England, of course, will not be wrecked. Such a ruin would be unfortunate for the South. The two sections are too much dependent upon each other for such a disaster to happen without both suffering. Without aspiring to the possession of delphic gifts one may safely say that when the South succeeds in making the finest grades of cotton goods, under natural advantages which New England can never possess, the latter section will adapt itself to changed conditions as readily as it has met the successful competition of the

former in the production of the coarser grades.

SMELTING AT NEW ORLEANS.

Advantages for the Development of the Industry There.

By Courtenay De Kalb, E. M.

It is a noteworthy fact that wherever a great seaboard city has grown up, if fuel is easily accessible behind it in the interior, there an important smelting industry has arisen. From this it may be predicated that where we find a city so situated, full of the vigor of youth and energy, with trade striving to reach it in ever-increasing proportions, both on the side of the sea and the land, there inevitably, sooner or later, must also spring into existence smelters, refineries and all that flows from these in the way of metal manufacture. To particularize further, the circumstances which must combine to render any great and permanent smelting industry possible are the following:

First—Easy accessibility to ores, against which the transportation charges must be light.

Second—Accessibility to a wide range of ores and furnace products, differing within proper limits in their composition.

Third—Easy accessibility to high-grade coals and coke, against which the transportation charges must be light.

Fourth—Similarly easy accessibility to fluxes, i. e., iron ores, rich iron slags and limestone, for the most part.

Fifth—Conditions so favorable for economical living that the cost of labor may not be too high.

Sixth—Proximity to and cheap communication with the centers of consumption for refined and finished metallurgical products.

The fortunate combination of these conditions has been reached in the British smelting centers, mainly through the extraordinary development of British shipping interests. Thus the smelting ores and mattes of the world are assembled, with food products, close to the source of abundant coal and fluxes, at a stone's throw from the homes of the great manufacturing industries of Great Britain. British ships, seeking to pay the fixed charges on the capital invested in them, when they cannot pay a profit, are ever scouring the seas, and so when they cannot find a paying cargo they will carry coal away from England, or bring ores home, at nominal rates rather than go in ballast. In the outcome the shipowner and the manufacturer at home are benefited. What has been said of England applies in large degree to France, although here we have a country profiting largely by the shipping of another.

Now let us examine the conditions at New Orleans. It is already a great port, yearly growing greater, destined, in spite of what some may say, to remain the greatest Southern port in the United States. It has what no other rival has—a great river, a natural artery of commerce, leading up into the heart of the greatest industrial belt of America. It matters not that the traffic is light on this river as compared with the traffic by rail to and from the Crescent City. There the river is, a perpetual menace to high transportation charges, and nothing can ever offset the advantages of this natural regulator of rates. By virtue of this New Orleans will hold her pre-eminence unassailable by her rivals. The time is also drawing near when a new tide of commerce will be turned in her direction by a water route from Chicago southward into the Mississippi. The resources of the Great Lakes will then be open to her, and our growing trade with the Gulf and Caribbean ports will inevitably follow this line of least resistance

and become tributary to New Orleans. Now, this involves, as a natural consequence, the development of enormous shipping operations at this point and along with these the most favorable conditions for the importation of ores at lowest rates. The sources of these ores are Mexico, Colombia, Cuba, in less degree other Central American countries, and, on the west coast, the vast extent of Peru and Chile. At once we confront the barrier of the isthmus, but it must be cut, and it behooves America to do it with all speed. Scarcely can any industrial problem in our country be examined but we find at some point an urgent need of this transisthmian ship canal. Come it will, because it must! We may count upon it, but we must also work for it and cease juggling over it if we are to have it soon. When this great gateway to the Pacific lies open the whole west coast will become tributary also to New Orleans, and the ores of Peru and Chile will be brought to her if she is ready to receive and treat them. This is the more certain because the western coast is mainly an arid region. It depends upon the products of the mine rather than the farm; hence our ships will go thence laden with merchandise, but they will need more ballast than the India rubber, cocoa, hides and wool which they will find there to bring them safely home, and they will perforce bring ores and mattes and regulus.

Let us see how large a supply of such material now finds its way to Europe from the countries named:

IMPORTS INTO THE UNITED KINGDOM IN 1896.

Copper ore, Colombia.....	410 tons.
Copper ore, Peru.....	761 "
Copper ore, Chile.....	11,344 "
Copper ore, Chile (not enumerated).....	1,837 "
Copper regulus, Mexico.....	3,368 "
Copper regulus, Peru.....	337 "
Copper regulus, Chile.....	471 "
Tin ore, Peru.....	66 "
Tin ore, Chile.....	3,764 "

Total22,358 tons.

IMPORTS INTO THE UNITED KINGDOM IN 1897.

Copper ore, Colombia.....	970 tons.
Copper ore, Peru.....	2,368 "
Copper ore, Chile.....	6,106 "
Copper regulus and precipitate, Mexico.....	7,675 "
Copper regulus and precipitate, Peru.....	1,993 "
Copper regulus and precipitate, Chile.....	4,962 "

Total23,174 tons.

Lead ore, Colombia.....	1,013 cwts.
Lead ore, Peru.....	936 "
Lead ore, Chile.....	661 "

Total2,610 cwts.

IMPORTS INTO FRANCE IN 1896.

Copper, Mexico.....	15,003 tons.
Copper, Peru.....	36,121 "
Copper, Chile.....	5,103 "
Tin, Chile.....	55 "
Antimony, Peru.....	64 "

Total56,346 tons.

IMPORTS INTO FRANCE IN 1897.

(Incomplete.)	
Copper ore, Peru.....	1,195 tons.
Copper ore, other countries.....	5,407 "

Total6,602 tons.

IMPORTS INTO GERMANY IN 1896.

Lead and copper ore, Chile.....	11,875 tons.
Lead and copper ore, Mexico.....	4,641 "

Total16,516 tons.

IMPORTS INTO GERMANY IN 1897.

Copper ore, Chile.....	7,567 tons.
Copper ore, Mexico.....	191 "
Copper ore, Peru.....	297 "

Total8,055 tons.

Silver ore, Chile.....	42,234 tons.
Silver ore, Mexico.....	6,375 "
Silver ore, Peru.....	7,356 "

Total54,020 tons.

Lead ore, Mexico.....	13,240 cwts.
Lead ore, Peru.....	137 "

Total13,377 cwts.

This makes a grand total of 95,220 tons of all kinds of metal products in 1896 and 101,931 approximately for the year 1897, and the figures for the latter period as given are incomplete. That a very large proportion of these ores could easily be diverted to New Orleans in future as

her maritime commerce expands may appear from an examination of the present conditions at that port. In 1896, 189 American steam vessels, with a total tonnage of 114,238 tons, and seventeen American sailing vessels, aggregating 3732 tons, entered New Orleans from Spanish-American ports (where ores are generally available) carrying cargoes, and six American steam vessels, with 1131 tons, and four American sailing vessels, with 3019 tons, entered from the same ports in ballast. It must be observed that the American vessels now plying in these waters are largely engaged in the fruit trade, which accounts for their returning laden. The case stands otherwise with the foreign vessels entering New Orleans, which depend chiefly upon general cargo. Of these, 243 steamships, with a total tonnage of 143,084 tons, entered from the countries previously indicated, carrying cargo, and ninety-two, with a tonnage of 135,792 tons, came in ballast from the same points. In the year 1897 there entered in ballast at New Orleans from the Spanish-American, Gulf and Caribbean ports two American steamships, with a tonnage of 2197 tons, and thirty-seven foreign steamships, with 47,849 tons, and two American sailing vessels, with 3734 tons. The total tonnage from the above ports which entered New Orleans during 1897 amounted to 280,792 tons, divided between 382 steam and thirteen sailing vessels. When such conditions obtain today, how much greater must the advantage for a smelting industry become when the canal is built across the isthmus and an American merchant marine of large extent has been called into existence!

We have seen that the ores can be had at New Orleans, and we cannot doubt that when smelting has become one of the great industries of that city a goodly proportion of the domestic base bullion, mattes and regulus which at present find their way to the Mississippi valley and the East will be diverted to such a new Southern market.

When we consider the question of fuels and fluxes little remains to be said. The Alabama coal fields lie at her door, and in point of transportation costs the famous Connellsville and Monongahela coking coals are just as near since the order of the government on July 1, 1897, opening the Monongahela river to free navigation, making these fuels but little dearer in New Orleans than in Pittsburg. The Tennessee and Alabama iron mines can furnish the cheapest fluxes in America, and the Mississippi valley, including Louisiana herself, can yield abundant limestone at almost nominal cost for quarrying and shipment. The other essential conditions for a smelting industry at New Orleans are self-evident and need no discussion. It would seem that the Crescent City had been appointed by nature to become a great smelting center, and with the building of the Nicaragua canal she should become the Swansea of America.

Baltimore Electric-Light Combination

The combination of electric-lighting companies of Baltimore will be known as the United Electric & Power Co. Officers have been selected as follows: President, Nelson Perin; vice-president, Josiah L. Blackwell; treasurer, John W. Ellard; secretary, W. Stuart Symington; directors, Messrs. Alexander Brown, Nelson Perin, Joseph W. Jenkins, Jr., George A. Von Lingen, H. Crawford Black, William T. Dixon and Jesse Hilles. The company has made a mortgage to the Maryland Trust Co. as trustee to secure an issue of 4½ per cent. bonds, which will amount to \$4,500,000. It is understood that this will represent the purchase of the various companies in the combination.

THE SOUTH'S FOREIGN COMMERCE

A Bright Future Predicted by Representatives of Steamship Lines—Instances of Its Expansion—Needed Legislation—Railroad Co-operation.

Several weeks ago the Manufacturers' Record published a description of the improvements which have been made to the terminal facilities of the South Atlantic and Gulf seaports within the last two years. The magnitude of the figures attracted much attention as indicating the great growth of the export business, which necessitated the expenditure of millions of dollars in elevators, warehouses, wharves and other work.

With this issue the Manufacturers' Record presents a number of statements from representatives of steamship companies operating vessels from Southern ports, giving their views on the development of Southern commerce. Taken as a whole, the statements are extremely interesting, as the majority indicate that the trade expansion will continue and that it is absolutely necessary to have even more facilities than at present, while deeper ship channels are imperative.

The Atlantic Transport Co. has recently sent representatives to Galveston and New Orleans to examine into the opportunities offered for steamship service between one or both of these ports and Europe. This company has a large fleet of vessels running between Baltimore, London and other ports, and also maintains a passenger and freight line from New York. In a letter to the Manufacturers' Record Mr. P. A. S. Franklin, general manager, states that the company is considering the advisability of establishing itself in the steamship business from the Gulf, but has not definitely decided upon its plans as yet.

Messrs. A. K. Miller & Co. of New Orleans, La., are agents for the Cuban Steamship Line, New Orleans and London service, five ships; New Orleans and Antwerp service, four ships; Glynn Line—New Orleans, Liverpool and Spain, eight ships; Larrinaga Line—New Orleans, Liverpool and Spain, eight ships; Havre Line—New Orleans and Havre, five ships; De Freitac Line—New Orleans and Hamburg, six ships. Messrs. Miller & Co. state that the business next year naturally depends to a certain extent upon the cotton crop. With a fair yield of this staple and no epidemic agitation they look for an active movement in exports. They state that the necessary legislation should be obtained to improve the South and Southwest passes of the Mississippi river, in order that the largest class of steamships can be loaded at the New Orleans wharves. The attitude of the railroad companies terminating at New Orleans has been very liberal in stimulating export trade. The Illinois Central, the Northeastern, the Texas Pacific and the Southern Pacific companies have been very notable in this respect.

This firm is strongly in favor of constructing the Nicaragua canal, stating that it will not only benefit New Orleans, but will increase the prosperity of the entire Mississippi valley, as it will open up the western coast of South America, as well as the Eastern Hemisphere, to American producers.

The West India & Pacific Steamship Co., represented in New Orleans by M. J. Sanders, has twenty vessels engaged in trade between New Orleans and Liverpool. The business has reached such proportions that two sailings weekly are scheduled. These ships are fitted with passenger accommodations, and are carrying cargoes consisting of grain, cotton, cottonseed products, lumber and provisions. Mr. Sanders states that the busi-

ness of this company alone is eight times greater than fifteen years ago. In his opinion, the port of New Orleans is now suffering very greatly from the need of a deeper and wider navigable channel from the main channel of the Mississippi to the sea. "The present channel," writes Mr. Sanders, "has but twenty-six feet of water, and this is entirely insufficient for the safe navigation of the big modern ocean carriers. A committee representing the whole of the exchanges of this port, endorsed by the whole Mississippi valley and the West generally, is now endeavoring to obtain legislation by Congress to open up a larger and deeper pass from the river to the Gulf of Mexico. This is the key to the whole question of the development of the trade of this port, and upon the action of Congress in this matter depends the whole future of this port, whilst the favorable action of Congress will not only cause an immense impetus to the trade of the port of New Orleans, but will be of inestimable value to the farmers and other producers in the great stretch of territory which geographically belongs to the Gulf ports.

"The opening up of the canal either through Nicaragua or across the Isthmus of Panama will still further benefit the Gulf ports, as through their gateways lies the natural route from the United States to the Pacific ocean."

Messrs. Street Bros., representing the Charleston Transport Line at Charleston, S. C., state that its steamers are in service between Charleston and various foreign ports. It forms a branch of the business of Messrs. Simpson, Spence & Young of New York, Liverpool and London, who have extensive interests in the South. The Charleston Line reaches Liverpool, Bremen, Manchester, Hamburg, Barcelona and Genoa, carrying cargoes of cotton, flour, meal, oil, iron and grain, as well as other exports. Messrs. Street Bros. are also of the opinion that the next cotton crop will considerably effect the export business in Charleston, although through the agency of the railroads terminating in that city they are securing general cargoes. As an indication of this business, since 1898 they have handled 600,000 bushels of grain, over 10,000 barrels of cotton oil, 76,000 sacks of flour and nearly 10,000 tons of cottonseed meal, also 10,000 tons of pig iron. The latter figures indicate the importance of the iron shipments by way of Charleston alone. The railroad companies have followed a liberal policy and have made all the effort possible to stimulate export trade by the way of Charleston. Cotton was almost an exclusive article of export up to two years ago, shipments of the other items being made in quantity only since that time. As a result of the diversity of exports, the firm has been obliged to largely increase the number of ships calling at Charleston, as well as to increase the number of seaports. For the last two years regular service has been maintained between Charleston, Hamburg and Manchester, while within the last year a Liverpool schedule has been added on account of the cargoes of cottonseed products and provisions. It is notable that much of the oil comes from the vicinity of Charleston, being manufactured in Augusta, Sumter and other Southern towns.

Messrs. Charles F. Orthwein & Sons of New Orleans represent lines in service between that city and a large number of Atlantic, Baltic and Mediterranean ports of Europe. The Head Line has a fleet of eight vessels calling at Belfast, Dublin and Baltic seaports. The largest of these ships can carry 9000 tons of cargo. The Forende Gulf Baltic Line, between New Orleans and Galveston, calls at Danish

ports, carrying goods for distribution in Northern Europe. Its steamers include six, ranging from 4000 to 6000 tons cargo capacity, and are newly built especially for this service. They are named after Southern States. In addition are three auxiliary vessels of 3000 tons capacity each. This line has connections with a number of lines of coastwise vessels owned by the same company, which enter the smaller seaports of Northern Europe. It is also agent for the Hamburg-American Line between New Orleans and Hamburg, which has had ten steamships out of New Orleans during the present season. The Creole Line to Mediterranean ports consists of three large vessels, but its business has increased to such an extent that two more are being built especially for this trade, which will be ready for service by the beginning of next season, when it is calculated to maintain semi-weekly sailings. The Phelps Line calls at Venice, Trieste and points on the Adriatic sea. This is a new line employing four ships, and is a Southern branch of the Mediterranean & New York Steamship Co. The Florio Line, one of the largest shipping companies in the world, also has a branch from New Orleans to Genoa, which carries passengers as well as freight. Four ships have cleared at New Orleans this season, and it is calculated that a regular service will be in force in 1900. This firm also operates what is known as the Orthwein Gulf Ports Line, which during the past season loaded fifty different vessels with miscellaneous cargo for European ports, each averaging from 3000 to 7000 tons.

In commenting on the outlook of New Orleans, Messrs. Orthwein & Sons believe that the present steamship service will be considerably increased next season. As to legislation favorable to Southern commerce they write:

"As regards legislation we would say that a concerted movement is now on foot and measures have been introduced into Congress for the opening of Southwest Pass, affording a channel thirty-five feet deep, which, when accomplished, will make the entrance to the port of New Orleans deep enough to admit the largest steamers afloat and allow them to load to their deepest draft. This facility is now recognized as a necessity, owing to the mammoth steamers that are now being built for the transatlantic trade. The harbor of the port of Galveston has of late also been very considerably deepened, affording sufficient water for the largest steamers that come to New Orleans.

"As to the attitude of the railroads entering New Orleans towards the steamship lines, we have always found them ready to work hand in hand with us, and their assistance in the development of exports is of the utmost value. All of the railroads now entering here have an excellent system of foreign freight agents, with agents in the interior who work on through rates in connection with European traffic, and vast quantities of the freight going through New Orleans is contracted through these sources. The railroads out of New Orleans have made it a practice to stimulate regular lines of steamers by giving a preference to them on the cargo they control.

"As to the Nicaraguan canal, we think there can be no doubt that the building of such a canal would be of immense benefit to New Orleans and the Gulf trade generally. As to the markets that would be brought into communication with us, it would seem to us that it is within the bounds of possibility that in the course of time we would have communication with the whole of the western shore of America, Hawaiian Islands, Philippines and Asiatic ports. We believe that with

the establishment of such a canal the port of New Orleans would soon take first rank among the largest ports of the world. The port of New Orleans has the facilities and the trade to handle any amount of traffic. There are six large trunk lines of railroads whose terminals are located here, and the location of the port at the mouth of the Mississippi river, draining an immense territory when its tributaries are taken into consideration, leaves no doubt of the advantageous position it occupies."

Mr. W. H. Hendren, manager of the North American Transport Co. of Norfolk, Va., which is a branch of Messrs. Simpson, Spence & Young's line running out of this port, states that it is expected to make an important addition to the present fleet of vessels now in service between Norfolk and Europe. This fleet carries a large quantity of miscellaneous cargo in addition to cotton during the season.

The Gulf Transit Co., which operates between Pensacola and Europe, is also making arrangements to place additional ships in service. This company carries the export traffic which the Louisville & Nashville Company hauls to Pensacola. It includes a large quantity of grain and provisions, as well as Southern iron, cotton and cottonseed products.

Mr. Alfred LeBlanc, agent for the Harrison Line of steamships at New Orleans, states that this company now has twenty-nine vessels in service and the prospects for business are very good. Mr. LeBlanc believes that the Panama canal is feasible and that it should be completed in the interests of American commerce.

A CENTER OF ACTIVITY.

Industrial Movements in Southwest Virginia and Tennessee.

[Special Cor. Manufacturers' Record.]
Bristol, Tenn., May 8.

Southwestern Virginia and Eastern Tennessee are on the high tide of an industrial flood. Railroad building, iron and coal mining, lumbering and telephone talking are the chiefest characteristics of this era of progress and prosperity. With Bristol as the center, these lines of industrial operations radiate in all directions.

President H. M. Aiken and Chief Engineer W. C. Crozier of the proposed Knoxville & Bristol Railroad are now out on the line surveying the route. This line is understood to be the connecting link between the Norfolk & Western at Bristol and the Atlanta, Knoxville & Northern at Knoxville, all practically one system.

Engineers are busy surveying the route of the proposed Atlantic & Western from Rocky Mount, in Franklin county, Virginia, through the counties of Carroll, Grayson, Smyth and Washington to Bristol. This is believed to be the Southern Railway seeking an eastern outlet from Bristol to tidewater at Norfolk.

The Virginia & Southwestern Railway (old South Atlantic & Ohio and Bristol, Elizabethton & North Carolina consolidated), which is owned and operated by the incorporators of the Virginia Iron, Coal & Coke Co., has its main offices at Bristol. Geo. L. Carter is president of both companies, and resides here. The Virginia & Southwestern is being extended at both ends. From Elizabethton, Carter county, Tennessee, an extension of twelve miles is being built up the Watauga River valley and Stoney creek to rich magnetic iron-ore fields, which are also being opened up in order to have the ore ready for transportation to Bristol's big 200 tons per day iron furnace as soon as the road to the mines is completed. This road will be continued into Johnson county, Tennessee, to the Doe mountain

iron-ore lands, which are also the property of the Virginia Iron, Coal & Coke Co., a distance of twenty-five miles from Elizabethton, Tenn.

The other end of the Virginia & South-western Railway runs from Bristol to Big Stone Gap. Surveys are being made for an extension from Clinchport, Va., up Clinch river and across the country to Coeburn and Tom's creek, in Wise county, where the Virginia Iron, Coal & Coke Co. has an immense quantity of coal lands. At Tom's creek said company has 200 coke ovens in operation, and are advertising for 500 additional hands to work on the erection of 300 more ovens, the building of railroad track and tenement-houses for laborers to live in.

The Virginia Coal & Iron Co. is building a standard-gauge railroad from Appalachia to Norton, in Wise county, a distance of fourteen miles. This road is called the Interstate Railroad, and at present runs from Stonega to Appalachia. The extension will parallel the Louisville & Nashville between points named. The Virginia Coal & Iron Co. owns and operates the coal mines and coke ovens at Stonega, Va. It also will build 200 additional coke ovens immediately. Stonega is near Big Stone Gap, the latter about sixty-five to seventy miles from Bristol.

A. J. Dull of Harrisburg, Pa., owns one-half interest in 3000 acres of extra fine white-pine timbered lands in Shady valley, twenty-five miles southwest of Bristol. He is in Bristol, and has had surveys made and will build a narrow-gauge road twelve miles in length, running from the terminus of the Holston Valley Railroad at Fish dam to Shady valley.

The Norfolk & Western Railway will build an extension from Radford to Floyd Courthouse, Va., a distance of twenty-five or thirty miles. The line will run up New river to Little river, and thence up the latter and its tributaries to Floyd Courthouse.

The East Tennessee Telephone Co.'s system in Bristol will soon be connected with its exchanges at Knoxville, Chattanooga and other Southern cities, and these, in turn, with cities north of the Ohio river.

Rogersville, Tenn., is soon to have a new electric-light plant. Address C. C. Cochran. LUKE DIXON.

Industries at Radford.

[Special Cor. Manufacturers' Record.]
Radford, Va., May 6.

Some of our most influential and wealthy citizens have organized a woolen-mill company. The capital stock is \$10,000, all of which has been sold, and the charter allows \$40,000 more. The manager has ordered the machinery, and it will be placed, on its arrival, in the company's three-story brick building, which they have just purchased from Langon Bros. Alongside of this building they will erect at once an engine and boiler house, and will be ready for manufacturing about the middle of June. The president of the company is Mr. Joseph H. Chambley; secretary and treasurer, Capt. J. G. Osborne.

Of equal importance with the above is the woolen mills of Messrs. Newby & Slenker of Snowville, Va. These gentlemen have decided to move their mills to Radford at once and add largely to their capital and equipments. The company has just been reorganized and elected S. J. Fisher, president, and Capt. E. F. Gill, secretary and treasurer. It will be known here as the Newby Woolen Manufacturing Co. They have a capital stock of \$10,000, and have just purchased the buildings of the old Radford Manufacturing Co., in which they will place a full set of machinery during the coming week.

It is understood that these mills will be of great assistance to each other, and they will contribute much towards making this a fine wool market. They will manufacture all grades of woolen goods.

The pipe works, located here and constructed at a cost of nearly \$500,000, are reported sold to the Virginia Coal & Iron Co., and it is stated that they will begin operation during the coming summer in connection with the large pig-iron works nearby.

Radford has a magnificent river that skirts its corporate limits, and which can furnish power enough, and at little expense, for an unlimited number of industries. Mr. George W. Miles, Radford, Va., president of the Board of Trade, will communicate with persons interested in its development.

The Radford & Pulaski Telephone Co. is rapidly placing in position its new lines, which will extend from Roanoke to Bristol and embrace all intermediate points. They are offering 'phones to people along the line at \$15 a year, and many are subscribing. The county people may connect with the main line for \$3 a year.

KENNER CRAWLEY.

Building at Fort Smith.

[Special Cor. Manufacturers' Record.]
Fort Smith, Ark., May 5.

Our wholesale business is receiving new additions in almost all lines. A. N. Rodgers of Denison, Texas, is putting up a building near the opera-house for a wholesale furniture store. The Seeley-Webber Hardware Co. is opening up an extensive establishment. The Meek Bros. are erecting a new building for a large wholesale candy business in connection with their factory. Mr. W. H. Whitlow of Fayetteville, this State, together with several prominent local parties, are contemplating opening a wholesale drug house. W. J. Echols & Co., wholesale grocers, are just moving into their new stone-front storehouse. W. J. Murphy, wholesale saddlery, has also moved and taken possession of his building.

There seems to be no intermission in the erection of new residences, many of which are very costly. At this time there are over 100 in process of construction, and yet the enquiry is very strong for more houses. The new electric street-car system is being completed all over the city.

The management of the Missouri Pacific Railroad system has established double daily service between here and Coffeetown, Kans., which completes the double service to Kansas City. This is of great benefit just at this time to move the large strawberry crop now being harvested. After that blackberries, melons, new potatoes and tree fruit will be shipped in the order named.

The commercial and industrial outlook is very promising. S. A. WILLIAMS.

Plans for Durant.

[Special Cor. Manufacturers' Record.]
Durant, Miss., May 5.

We have one of the best and largest wagon factories in the South, the Love Wagon Co. The heading factory here covers three acres, and ten acres have recently been acquired for enlargement. Plans are afoot on an electric plant, a cottonseed-oil mill, a \$10,000 school building and State improvements. The Illinois Central Railroad Co. will rebuild on a large scale the roundhouse. A box factory is proposed to meet the demands of the growing strawberry and vegetable interests. W. T. JOHNSON.

Telephones at Rusk.

[Special Cor. Manufacturers' Record.]
Rusk, Texas, May 5.

Messrs. Wolinski & Vining are erect-

ing poles and fitting up an exchange for a long-distance and local telephone service. The survey for the water works has been completed.

MOVEMENTS AT BIRMINGHAM.

Activity Among the Large and Minor Industries.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., May 9.

Towards the middle of the past week the market was advanced to \$10.50 for gray forge, and at this price about 15,000 tons were booked. Some sellers then advanced price to \$10.75 because they wanted no more orders for that grade. But some continued quotations at \$10.50, and today possibly some could be had for last-half-of-year delivery. But for spot or nearby deliveries outside prices prevail. One lot of No. 2 foundry iron, 1000 tons, which early last week could probably have been bought at \$11.25, certainly at \$11.50, was priced today at \$12.25. At this price small lots sold today, and one lot brought \$12.50. A fair price for No. 3 foundry would be \$11.25. Saturday No. 2 foundry was offered at \$11.75, and one seller was continuing his quotations at \$11.50. No. 1 foundry is quoted at \$12.50. The soft grades are on a parity with Nos. 1 and 2 foundry.

The export inquiry has been very fair, and more business was transacted than for quite a while back. Still it was only moderate. But any business at all shows that the reported advance on the other side is a genuine one. Stocks continue to be practically nil. At an important furnace interest one day last week the stock on hand was fifty-one tons, and that was awaiting cars for shipment. It is given out with great positiveness here that the Republic Steel & Iron Co. will certainly erect one, if not two, furnaces at Thomas, making their number four in all; that the rolling mill at Gate City will be moved bag and baggage to Thomas, or in lieu thereof a blooming mill will be erected at Thomas and connected with Gate City by rail. Mr. Sam. Thomas is spoken of as vice-president, and Mr. Edwin Thomas as general manager of the Birmingham interests. The mills have not yet concluded stock-taking. The Alabama Rolling Mills at Gate City expect to finish this week and at once resume operations. Their former president, W. J. Behan of New Orleans, was here the past week, and with his coming was the announcement that \$100,000 of outstanding bonds were canceled. This makes it evident that the Republic Company is in the saddle. There will be improvements at the rolling mill, but one cannot yet announce with positiveness their character nor extent. The great steel mill at Ensley is now making rapid progress. The open-heart furnaces, for which contract was given to the Pittsburgh firm of Riter-Conley Company, are nearing completion, and will be turned over to the steel-mill people this week. The foundry and machine shops are being hurried rapidly to completion, and the rod and wire mill are preparing to put in the conveyors which are to transport the molten steel to their mill. The steel plant has contracted with the Means-Fulton Company for ten air and gas-valve flues and hoist rigging and grading over pits to the hydraulic shears. Everything now is moving like clockwork, and every week sees lots of detail work completed. There have been some transactions in coal lands completed, concerning which particulars are held back. But there will still be further completion of trades this week that will find their way into print.

There have been three important and large transactions in real estate in city

limits this week that are worthy of consideration. The largest was the sale for \$120,000 of the Hewlett block, corner of Twentieth street and First avenue. It was about 100 feet front each way. The purchase price was \$1200 per front foot. A new building will be erected at the expiration of present tenant's leases. But just what kind of a building no one here knows. Then a lot fronting 140 feet on Nineteenth by 150 feet on Fourth avenue was sold for \$50,000. The purchasers of both lots were the same in identity. It is supposed the last lot will be used for an opera-house building. The price per front foot of latter lot was \$357. Then the building at corner of Twentieth street and Morris avenue, known as the Elyton Company's Building, fronting 57½ feet on Twentieth street, was sold for \$41,000, or about \$710 per front foot. So one can see that real estate is looking up. A year ago for this property there would have been asked not over two-thirds of the amount it has realized.

Our minor industries continue to be full of work, and are running full-handed. Some of them have night shifts.

J. M. K.

Eastern Iron Markets.

[Special Cor. Manufacturers' Record.]
Philadelphia, Pa., May 11.

The Eastern Pennsylvania iron trade has not developed any new features, and the quotations heretofore given prevail, with scarcely a fluctuation above or below the dead level of a month ago. Pig-iron users, whose supplies run out in a few weeks, are not very quick to place orders. Your correspondent has talked with some of the large foundry-iron users, and hardly any are anxious to precipitate large orders at current prices. The furnaces recently blown in have contracted for all the iron they will be able to deliver. Best No. 1 X foundry will bring \$17 delivered, and No. 2 X \$16 to \$16.25. Forge irons are in active demand at \$15 for fall delivery. The mills are all loaded with work.

Billets have advanced to \$28.50 and \$29, and may go higher. The country's requirements for crude steel are growing. The mills are not selling much, but soon will.

The bar mills are booking as much business as the managers care to take. The prospects are for dearer pig, and the bar-iron makers want to be on the safe side. They all say there is an abundance of work to come in.

The skelp mills booked some good business this week at two cents.

The sheet-iron mills are all busy, and more fall business was offered this week, particularly for corrugated and galvanized material, the demand for which is going to be big.

The pipe-makers have been offered some Western business. A combination is under way in this department of the iron trade, as is also the case in the bar-iron industry, in which options on Eastern mills are being taken.

Merchant pipe and merchant steel are again active. Mills are reported overcrowded. Western requirements are pressing in and an upward tendency has been given to steel used in agricultural-implement plants especially.

The plate mills are crowded as ever, and the weekly bookings of new orders show that consumers are as anxious as ever. Prices are very firm. They have not advanced, but rumor today says another advance is imminent. A big bridge-building order was recently secured here to make material for a bridge in India.

Structural mills are again booking important orders at prices ranging from 1.65 to 2 cents.

Steel-rail mills are doing well. Within

a week large lots of old iron rails have been offered, but at outside figures.

A LIVELY CONVENTION.

The Cotton Ginners of Texas Discuss Cotton-Baling Methods.

At the convention of the Texas Cotton Ginners' Association there were some very interesting discussions of the various systems of baling and cotton handling now before the public. Mr. Jens Moller, one of the leading ship brokers of Galveston, at the request of the convention made an address from the ship-owner's point of view. Mr. Moller said that he thought some remedy could be devised that would save the square bale for a while at least. What will become of it eventually he did not pretend to know. He spoke, so he said, entirely from the standpoint of the transportation man, as he knew nothing about the staple itself. Mr. Moller advocated a greater density, and said the standard fixed by the railroad commission, twenty-two and one-half pounds to the cubic foot, is too low. He suggested to the ginners that if they would improve their methods they might be able to hold on yet for several years, say six or seven, but he believed the ultimate result would be the adoption of the round bale. He said that the American bale of cotton is and has been a disgrace to the whole country. Before becoming a ship broker he had been a seaman, and had carried cotton from India, Egypt and Brazil, and he gave a description of the different bales and said they were all better than the American bale. In India all the cotton is controlled by a few firms, principally by Ralli Bros. They buy the cotton in the seed, and it is ginned and compressed in the same plant. They put up a uniform package, with a density as great as that of wood. The bales are practically square, and can be put in a ship without skilled labor. The same is true of the Egyptian bale, but the Brazilian is not so good, although superior to the American bale. All of these bales are entirely covered with a close burlap, through which not a particle of cotton can be seen. It can be sent around the world without loss in weight. These are the claims that are also made for the round bale. It is perfect and is entirely covered. The allowance to be made by the buyer for loss of weight in the covering is very small; hence he can afford to offer more for it than for cotton packed in the square American bale. Mr. Moller called attention to an offer which is being made by Inman to pay a premium of forty-five cents a hundred for cotton in the round bale. He said he did not think it a bluff, but that they could afford to do it, as they save ten cents a hundred pounds in the compressing, and the difference in the weight of the bagging on the respective bales and the saving in weight would about make up the difference.

After discussing the system of stowing cotton on board ship and the saving in freight by giving greater density to the present square bales, he added: "There have been various round bales introduced with a great deal of success. The round bale has not only the advantages mentioned, but it has others. It can be handled by unskilled labor. It costs forty-five cents to stow a square bale. The round bale, which weighs about half as much, costs about twelve and one-half cents to stow, making twenty-five cents saving on the quantity contained in the square bale. Then there is not always a sufficient supply of skilled labor on hand for the handling of square bales. If the square bale should be put up with the same density of the round bale, and is well packed and is well covered, it

would possess the same advantages from the ship-point of view. The great trouble, however, is the non-uniformity of the bales. Cotton is stowed in the ships on the principle of laying bricks in a wall. To stow bales of varying sizes is as difficult as it is to build a brick wall with bricks of varying sizes. The room taken by a tier of cotton is regulated by the size of the biggest bale. One big bale in a tier will destroy all the benefit of the good bales."

Pointing out the methods necessary for the ginners, who want to continue handling square bales, in order to maintain their business, he said that if some of these remedies are not adopted he feared the ginning business would vanish as did Galveston's compress business twenty years ago, when the demands of business forced the work of compressing to the interior. It was hard for Galveston to lose this business. It may seem hard that the ginners may lose their business unless they change their methods, but sympathy counts for naught in such matters. If the ginners will adopt these remedies he believed they could at least prolong their business for a few years—long enough for them to make a profit out of their present plants. If not, and the round bale is a commercial success, he feared it would very soon supplant the square bale and relieve the ginner of his business. The 40 per cent. tax proposed against the round bale would not save the ginners, because such a tax would be unconstitutional.

As a result of Mr. Moller's discussion of this subject it was decided that an effort be made to secure what is called a "Standard" square bale of cotton, using a box of the size of twenty-four inches wide by fifty-four inches long, and with a uniform weight of about 500 pounds. In discussing this Mr. O. J. Morris of Hillsboro objected to the resolution and asked what was the use of the ginners tying themselves up to the compresses. The time ought to come, and would come, he said, when every ginner would be his own compressor. Mr. Henry Schaffer of Loreno offered the following resolution:

"Resolved by the Texas Cotton Ginners' Association, That while we as individuals may and do have our preferences for systems of handling cotton, yet in the matter of treatment before the law we favor equal and just treatment and oppose class legislation. On that account we oppose the bill introduced in the legislature by Representative Cole, taxing the income of gin machinery lessees, as being contrary to a sound public policy and not demanded by any legitimate interests, calculated, as it appears, to do more harm than good."

Mr. Schaffer spoke to the resolution as the owner of a square-bale gin. He said the ginners had gotten along in the past without such legislation and would get along in the future without it. The only people who were raising such a howl about the round bale are the buyers and the compress men. They have previously turned a deaf ear to the ginners, but now they want the ginners to deliver them from the round bale. The compress men run around after the ginners at every meeting now asking something, and he had gotten tired of pulling their chestnuts out of the fire.

After very warm discussion this was laid on the table.

Acting upon the suggestion of one of the delegates that the members indulge in an "experience" meeting, with each member giving his experiences for the past year, a general discussion resulted. Mr. A. A. Walden of Temple was the first man called upon.

Mr. Walden had been operating the

square and round bale systems, but had not operated the round bale the past season. He stated that "to make the round bale was the grandest thing in the world today." Continuing, he said: "If the ginners did their duty there never would have been such a thing as the round bale." He argued in favor of a uniform bale and the necessity of its establishment in the interests of all concerned. He illustrated a comparison of the injustice as now practiced by telling of his own ginning. He said he was careful to make a nice bale, sew up all the ends and make a very pretty piece of work. Another fellow handling the same grade of cotton would turn out a big six-foot bale, bunglesome and untidy, and get the same price for his cotton as the even and well-ginned cotton.

Mr. Blanton of Whitewright, who operates both a round and square-bale press, gave as his experience that the round-bale system was very satisfactory. He asserted, however, that the round bale gave more money to the producer than it does to the ginner. As to sampling, he said the round-bale sample is more honest and generally satisfactory than samples from the average square bale. He thought that the square bale, in the interest of all who handle it, ought to be made as uniform and neat as possible. He answered a great many questions put to him from his listeners.

Mr. Von Boeckman of Seguin spoke of the matter of the uniform bale and the premium which buyers and compresses promised to pay for that bale last season. He said the uniform bale was a failure, that the premium was not paid and the buyer was to blame. He said there was no use in talking about uniform bales any more, at least if we expect any help from buyers and ginners. Let us look out for ourselves. He is a square-bale ginner, and was loudly applauded.

Another member contended that the buyers could dock the big bales and bales not standard size if they would, and help out ginners in that way. But they would not do it, and he had not changed his press until he consulted his customers not to demand big bales. He said growers must be educated up to the value of a uniform bale and then the trouble would be obviated. We must do this or go out of business.

Mr. Adams of Celeste said the Lowry round-bale presses were springing up all around him—one east, west, north and south of him, and one in his town. And they didn't ask him anything about coming there. He proposed to see them out, and could gin cotton as cheap as they could if his customers would stay with him. If he failed, all right. Anyhow, the producers would make money by the competition. If they pushed him too hard he would quit, or if his customers demanded a round-bale press he would put one in. The Lowry people had treated him very decently.

Mr. Ray of Whitewright and Argyle said his firm used the American Cotton Co. round-bale system. He put up 5000 bales last season, and the results were very satisfactory. He had no trouble about classing or sampling cotton. He believed the American Cotton Co. charged too much royalty. The ginner should have the compressing and he hoped to secure concessions. He said, however, that company had treated him entirely fair. The sample and fiber were all right. He said if there were all square-bale presses big companies might easily form a combine and freeze the little ginners out. He said the Texas legislature had made a grave error in trying to pass the bill taxing the round-bale presses 40 per cent. on income. It had impelled one

firm, he was sure, to put up their own presses all over the State instead of leasing presses, as they otherwise would have done. He asked if any ginner, even if he could buy a round-bale press, was prepared to do so, in view of the improvements and many new methods coming on.

Conspicuous Figure in Railway Affairs

A recent issue of the Railway Age of Chicago contains an excellent illustration of Mr. John Skelton Williams, with the following brief sketch of his career:

"Many railway men who have read of the election of Mr. Williams to the presidency of the various companies constituting the Seaboard Air Line system will probably be surprised when they see his portrait, which is published on this page. It is evident that Mr. Williams is not an old man. As a matter of fact, he will not be thirty-four until next July, having been born on July 6, 1865. He was educated in Richmond, and took a law course at the University of Virginia. After finishing his education he entered the banking house of Messrs. John L. Williams & Sons, and was admitted into partnership when he reached the age of twenty-one. His rise in the world since has been rapid. He was one of the founders of the Richmond Trust & Safe Deposit Co., and is now president of that institution. He was at one time president of the Richmond Traction Co., but resigned that office in order to devote more time to his other projects, having been succeeded by his brother, E. R. Williams. He prepared the plan for the reorganization of the Savannah, Americus & Montgomery Railroad, now the Georgia & Alabama Railway Co., and became president of that corporation when the receivership was ended, he being then thirty years of age. With the Baltimore banking house of Middendorf, Oliver & Co, he formed the syndicate which acquired the Seaboard & Roanoke and the Baltimore Steam Packet Co., and on February 5 last he was elected president of the Seaboard & Roanoke, the Raleigh & Gaston Railroad, the Carolina Central Railroad, Raleigh & Augusta Railroad and Baltimore Steam Packet companies. He is also a director in various trust companies and other institutions in Richmond, Baltimore and New York. The recent developments for the expansion of the Seaboard Air Line are largely credited to him, and, with his personality and such a record as he has already made, it is probable that he is destined to be a very conspicuous figure in the railway affairs of the country."

Improvements at Norfolk.

Among recent improvements at Norfolk noted in the Landmark are the completion of a new hotel and the renovation of an old one, the erection of a bank building with modern office facilities, the paying of a broad avenue leading to the joint depot of two railroads, the modernizing of the street railways and the building of a new line, the improvements at the railroad and steamboat terminals, and the establishment of new and varied manufacturing industries in and near the city. Plans are also making for a number of business structures, and work has begun upon the new postoffice building. The Belt Line Railroad is regarded as a great addition to the commercial facilities of the city.

During the first four months of the year the total movement from the Alabama and Tennessee points was—pig iron, 356,000 tons; cast-iron pipe, 39,000 tons. The pig iron for export amounted to 52,000 tons, and iron pipe for export to 6700 tons.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

Norfolk & Southern Terminals.

A dispatch from Norfolk, Va., is to the effect that the Norfolk & Southern Railroad Co. will expend about \$150,000 in the improvements which it proposes to make to its terminals at Berkley. They include the rebuilding of most of the present wharves and dock, also extensions which will give the company fully one-half mile of wharf on the water front. The company purchased the car ferry steamer John W. Garrett, which will be used in its North Carolina service.

Daily Service to West Point.

The Baltimore, Chesapeake & Richmond Steamboat Co. has determined to resume its daily service between Baltimore and West Point, Va. These boats run in connection with the Richmond & West Point Railroad, and form a pleasant route between Baltimore and Richmond by rail and water. The company has been maintaining a tri-weekly service between these points.

Jottings at the Ports.

Grain exports from Galveston for the month of April amounted to 664,000 bushels, an increase over the same month of last year of 80,000 bushels.

Recent exports of iron from the Birmingham district included shipments to Hamburg, Germany, Genoa, Italy, Antwerp, Belgium, and Bremen, Germany.

The Weems Steamboat Co. of Baltimore is considering the construction of an additional vessel for its service, which is on Chesapeake bay, the Patuxent and Rappahannock rivers.

The Clyde Steamship Co. announces that it has decided to begin a weekly service between Providence, R. I., also Charleston, S. C., and Jacksonville, Fla. The first steamer will leave for the South early in June.

It is understood that the business men of Augusta, Ga., are considering the idea of forming a company with \$50,000 capital stock to put on a line of steamers between Augusta and Savannah on the Savannah river.

Preliminary work has commenced at Sparrow's Point, Md., on the contract for building the steel dry-dock to be located by the government at Algiers, La. The work includes building of a dam to form a berth for the dock.

It is expected to begin work upon the improvement to the ship channel leading to Baltimore harbor in a few weeks. The specifications call for a width of 600 feet, which will be double the present width, and a depth of thirty feet.

The shipment of cattle from Galveston continues on a large scale. Within two weeks recently 3500 head were exported, while eight additional steamers had been engaged since that time to carry stock. Most of the shipments are being made by the Munson Steamship Line.

The War Department has approved the plan for deepening what is known as the Texas City channel, which is to extend from Bolivar roadstead, on Galveston harbor, to Texas City. The channel will be three and one-half miles long, twenty-five feet deep and 100 feet in width.

The New York & Baltimore Transportation Co., it is stated, has decided to add two steamers to its fleet, and has given a contract for the work to the Harlan & Hollingsworth Shipbuilding Co. of Wil-

mington, Del. Each vessel will be 219 feet long and have a cargo capacity of about 900 tons.

The Donaldson Line of steamships, running between Baltimore and Great Britain, will have an additional vessel, which was recently launched by the London & Glasgow Shipbuilding Co. It will be 402 feet long, forty-nine feet beam, and will have a capacity for carrying 7000 tons. The new vessel is to be named the Lakonia.

The passenger business from Galveston to Europe has reached such proportions that recently one of the North German Lloyd ships leaving port was unable to carry the number of persons offering to take passage. It is understood that this company is building a vessel which will be used in the service between Galveston and Bremen when completed.

A dispatch from Richmond, Va., is to the effect that the Trigg Shipbuilding Co. of that city will probably bid on two of the six cruisers which have been decided upon by the Navy Department. They are to be known as "protected" cruisers, and will be of 2500 tons displacement each. The Trigg Company is now working on a number of torpedo-boats for the government.

The Kanawha Navigation Co. of Charleston, W. Va., has purchased what is known as the Carr Line of steamers. The Navigation Company has recently been formed to operate steamers on the Kanawha and Ohio rivers. The coal shipments by way of the Kanawha river during the month of April amounted to 2,622,000 bushels, requiring 199 barges. This is an increase of nearly 1,500,000 bushels over the preceding month.

To Develop Florida's Resources.

Work is rapidly progressing upon the Jacksonville & Southwestern Railroad, which, as recently stated in the Manufacturers' Record, is to be built from Jacksonville, Fla., westward through the northern and western portion of the State a distance of about 105 miles. The Cummer Lumber Co., which has extensive interests in Florida, is the principal promoter of the line. Thus far twelve miles have been completed ready for operation, and right of way secured for nearly forty miles. It is calculated that forty miles will be completed and in operation by September 1. In Duval county the road will reach Baldwin and several other small towns, while in the interior of the State larger and more important places will be run through. It has not as yet been decided by the owners whether to build to Manatee by way of Lake Butler or by New River and Gainesville, but this will be determined in a short time.

About 200 men are at work on the construction of the road at present, and more are being added daily. The equipment so far consists of an engine, several box and stock cars and fifty-four log cars. An order for two new engines and all necessary passenger coaches, box, stock, flat and log cars will be given within the next sixty days, and they will be ready for use so soon as the road is finished. The road will run through phosphate and timber lands owned by the Cummer Lumber Co. Besides the phosphate deposits along the line, there are 100,000 acres of timber.

The officers of the railroad are: W. W. Cummer, president; Jacob Cummer, vice-president; Arthur Cummer, treasurer; Waldo E. Cummer, secretary, and George L. Davis, general manager of construction.

The output in the Joplin (Mo.) district for the week ended May 6 was 10,223,170 pounds of zinc and 928,430 pounds of lead, valued in all at \$256,290.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

International & Great Northern.

The International & Great Northern Railroad Co.'s improvements to its lines in Texas will result in rebuilding a large section of the road. At many points the grade has been considerably reduced by the rebuilding of the roadbed. A system of iron tanks for water purposes is being constructed to replace the wooden tanks now in position, while the track is being relaid with 75-pound steel rails. Considerable attention is being given to the stations and surroundings, many of the depots being rebuilt. This company has facilities for constructing its own cars, and recently four passenger coaches were turned out at the Palestine shops, which are finely built and equipped with all the latest improvements.

The International & Great Northern has decided to issue a publication devoted to the resources of the country traversed by its system. It is termed the "Illustrator and General Narrator." The first number is handsomely illustrated, and contains a large amount of interesting information which is especially valuable to the prospector and homeseeker in the Southwest. The paper will be published monthly by the company, and is edited by R. R. Claridge.

Improvements on the Southern.

From time to time the Manufacturers' Record has referred to the extensive improvements being made along the line of the Southern Railway. According to a statement of Vice-President Gannon, thus far during the present year over 100 sidings have been built to connect the Southern with industries located adjacent to it. Other improvements include contracts for about \$300,000 worth of bridges to replace similar structures at different points along the line, while already during the present year the Southern has received 35,000 tons of steel rails which will replace lighter grades on its tracks. This is in pursuance of the plan to relay its main lines with 80-pound rails. The Southern has also made arrangements to purchase sixteen locomotives, ten passenger coaches, five mail and baggage cars and 1000 freight cars. Altogether the outlay will represent fully \$2,000,000.

What a Railroad Does for a Town.

The value of railroad terminals and repair shops in the building up of a town is shown in the case of Cumberland, Md., where the Baltimore & Ohio has an extensive repair plant, also a roundhouse and freight yards. At present the city is the residence of about 2500 employees of this company alone. It is calculated that the company purchases nearly \$600,000 worth of supplies annually. The amount disbursed through the employees will amount to fully \$25,000 weekly. The shops of the company at Cumberland were described in detail several years ago in the Manufacturers' Record, when plans were first prepared for the construction. It is understood, however, that a new boiler-house and other smaller buildings are to be added on account of the large amount of repair work needed.

Railroad Building in Texas.

The passage by the Texas legislature of the bill authorizing the Houston & Texas Central Railroad Co. to purchase the Central Texas & Northwestern, Fort Worth & New Orleans, the Austin & Northwestern and several smaller lines means that the controlling company will build over

fifty miles of new line in the near future. The Houston & Texas Central has prepared elaborate plans for enlarging its system, but, like several other companies in Texas, has been unable to carry them out, owing to the necessity for legislative authority. It is probable that the Gulf, Beaumont & Great Northern Railroad Co. will also receive authority to make several combinations, which will enable it to build over 100 miles of extension in Northeast Texas.

Illinois Central and New Orleans.

The Illinois Central Railway Co. has signed an agreement with the New Orleans city authorities relative to its proposed terminal tracks, and it is understood that it will at once carry out its plans for improvements which were held in abeyance awaiting the decision of the city government. The franchise it accepts allows it to build a double-track road along the river front from Peniston street to the Orleans parish boundary. This will enable it to carry a much larger quantity of export freight within the city limits than at present, and to reach property which it has secured for wharves and other buildings. The plans of the company have already been detailed in the Manufacturers' Record.

Washington Railroad Consolidation.

Messrs. F. C. Stevens, O. T. Crosby, Charles A. Lieb and H. D. Myrick are interested in the plan to operate all of the street railway lines, also the electric-light systems of Washington by one company. It is stated that the United States Mortgage & Trust Co. has offered to furnish the necessary funds, and that the combination will represent a capital of fully \$25,000,000. The absorption of the various lines has been in progress over a year. The roads included in the combination are the Anacostia & Potomac, Capital, Metropolitan, Columbia, Brightwood, Washington & Great Falls, Forest Glen and the Washington & Glen Echo.

Tifton to Thomasville.

Relative to the Tifton, Thomasville & Gulf Railroad, recently referred to in the Manufacturers' Record, F. J. Ansley, secretary and treasurer of the company, writes as follows: "We are building now a road fifty-six miles long from this point to Thomasville, Ga. We hope to complete the road by January 1, and will use 60-pound rails. No iron bridges are to be used. We have money matter arranged to complete and equip road. Officers are H. M. Atkinson, president, Atlanta, Ga.; John W. Hightower, vice-president, Hawkinsville, Ga., and William A. Heath, general manager, Tifton, Ga."

Sale of Crescent City Line.

R. M. Walmsley of New Orleans has purchased the Crescent City Street Railroad for a company which intends operating it. The price paid was \$3,000,000. The Crescent City road is about fifty-one miles long and operated by electric-power. It has 139 cars, and is considered one of the most important lines of the city. The price paid represents the bond issue on the line. It is understood that the sale is made in the interest of another company, with which the Crescent City will be consolidated.

To Extend the Line.

According to a dispatch from Blackburg, S. C., the South Carolina & Georgia Extension Railroad Co. has determined to issue bonds to the amount of \$1,800,000 to complete the proposed route from Gaffney to Spartanburg. It is understood that this company is not included in the lease of the South Carolina & Georgia

gia Railroad proper to the Southern system, and that it will remain independent. The decision was ratified at a meeting of stockholders, of which J. P. Sinclair acted as chairman.

Fast Time via the Seaboard.

The Memphis (Tenn.) Scimitar of April 24 says that the Seaboard Air Line and the Nashville, Chattanooga & St. Louis Railroad brought into Memphis yesterday two cars of freight which had made actual running time of four and one-half days from New York. This is the fastest time made up to date to this city by a rail and water line, and is close to the time made by the all-rail lines, none of which run it in less than four days.

Railroad Notes.

Joseph N. Brown has been appointed Atlanta passenger agent of the Seaboard Air Line.

Richard Carroll, vice-president of the Mobile & Ohio, it is announced, has resigned on account of ill-health.

The Baltimore & Ohio has decided to have four division engineers on its line east of the Ohio river, instead of six, as heretofore.

E. E. Smythe has been appointed general freight agent of the Kansas City, Pittsburg & Gulf Railroad, with offices at Kansas City, Mo.

W. C. Christian of Raleigh, N. C., has been appointed Norfolk passenger agent of the Seaboard Air Line. W. C. Shoemaker has been appointed Eastern passenger agent, with offices in New York.

A block of Georgia marble weighing over fifty tons was recently shipped from the quarries of the Southern Marble Co. at Marble Hill, Ga., to Providence, R. I., where it will be used for the Statehouse now being constructed.

The West Virginia Central & Pittsburg Railroad shops at Elkins, W. Va., recently turned out twenty-seven coal cars of thirty tons capacity in addition to repairing two passenger coaches and five locomotives. The actual working time was twenty-five days.

Another step has been taken in the consolidation of the Atlanta street railway companies by electing Earnest Woodruff, president of the Atlanta Railway Co., and L. Bloodworth, Jr., vice-president. Mr. Woodruff is now president of the Consolidated and Atlanta companies.

The St. Louis, Cape Girardeau & Fort Smith Railroad has been sold by order of the court to Albert S. Bard of New York, who, it is understood, represents a company which will operate it. The line extends from Cape Girardeau to Hunter, Mo., a distance of ninety-four miles.

The St. Louis, Iron Mountain & Southern Railroad Co. has added a fast train to its schedule between St. Louis and Texarkana, Texas. This train is known as the "cyclone express," and will make the run between these places in about eighteen hours. The distance is 490 miles.

The Galveston, Houston & Northern Railroad Co. has taken formal possession of the Galveston, La Porte & Houston Railroad, which its representatives secured at the recent sale by order of the court. The Galveston, Houston & Northern is supposed to be acting in the interest of the Southern Pacific Company, although no official statement to this effect has been made.

The erection of a cotton-yarn mill or a cloth mill is talked of at Dyersburg, Tenn. Information can be obtained by addressing J. N. Parker, Dyersburg, or J. H. BuBose, Box 131, Memphis, Tenn.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Cotton Movement.

In summarizing the cotton movement for the first eight months of the year Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight was 10,462,659 bales, a decrease of 172,452 bales from the same period of the preceding season. The exports were 6,479,230 bales, a decrease of 208,985; takings by Northern spinners 2,047,897 bales, a decrease of 86,553 bales; by Southern spinners 992,838 bales, an increase of 43,161 bales. The Southern mills are already credited with nearly 33 per cent. of the American takings. During the 247 days of the season up to May 5 the cotton brought into sight amounted to 10,515,670 bales, a decrease of 160,796 bales. Exports were 6,563,323 bales, a decrease of 93,997; takings by Northern mills 2,058,511 bales, a decrease of 77,687; by Southern mills 1,008,945, an increase of 35,304 bales.

A \$250,000 Cotton Factory.

It is announced from Wilmington, N. C., that a \$250,000 cotton factory will be erected in that city this summer. A stock company with capital of \$250,000 will be organized and contracts for erection of the necessary buildings will be awarded within thirty or sixty days, and the entire plant is to be ready for operation by January 1, 1900. One hundred acres of land has been purchased as a site for the enterprise, and the equipment of machinery will be 10,000 spindles and 500 looms, affording employment to 300 hands. Main building to be 250x125 feet, two stories, with a three-story section; engine-room, 30x50 feet; boiler-room, 40x50 feet; building for dyeing plant, and 125 operatives' cottages. These buildings will cost \$70,000. Mr. E. C. Holt of Burlington, N. C., interested in a number of cotton mills, is promoting the new company.

Chattanooga's 10,000-Spindle Mill.

The company mentioned last week as forming at Chattanooga, Tenn., has filed its charter under the name of the Richmond Spinning Co., with capital stock placed at \$150,000, and will make immediate contracts for the erection and operation of its mill. The plant will have 10,000 spindles and the product will be yarns. The principal stockholders and directors are Messrs. E. G. Richmond, Morgan Llewellyn, Lumus Llewellyn, David Giles, Augustus Rhat and C. L. Isbester of Chattanooga, Tenn.; Garnett Andrew of Rossville, Ga.; A. B. Sanford of Boston, Mass. Mr. Richmond is to be president, and Mr. Sanford, vice-president.

20,000 Additional Spindles.

The annual meeting of the stockholders of the Mills Manufacturing Co. of Greenville, S. C., was held on May 2 to consider regular business and the proposed addition of 20,000 spindles, recently reported as decided upon. The stockholders authorized the issuance of an increase of stock to the amount of \$150,000 to pay for the new machinery, and the officers will take steps immediately to purchase same. The company now operates 10,000 spindles, its product being 40-inch twill goods.

A 10,000-Spindle Mill at Tarboro, N. C.

The Fountain Cotton Mills of Tarboro, N. C., lately noted as incorporated for the manufacture of cotton goods, etc., has fully organized and elected officers. The

officers are Mr. W. E. Fountain, president; A. M. Fairley, vice-president and general manager, and D. L. Litchenstein, second vice-president. The directors are Messrs. George Howard, G. M. Serpell, T. H. Cattlin, W. Newton Smith, John L. Bridgers, Wiley G. Webb, Fred. L. Wiggins, W. L. Sellings, D. Litchenstein, A. M. Fairley and W. E. Fountain. The company will award contract at once for the erection of a building to accommodate 10,000 spindles.

Another 10,000-Spindle Addition.

The Spencer Mountain Mills of Lowell, N. C., will erect a 10,000-spindle and 100-loom addition. The controlling management decided definitely on this step recently and has authorized the officers to make immediate contracts for the erection of the necessary buildings and the manufacture of the required machinery. An expenditure of over \$200,000 will be made. The present plant has 6000 spindles in place. Mr. J. C. Rankin is president of the company.

A 5000-Spindle Mill.

The Valley Falls Manufacturing Co. of Lolo, S. C., has been incorporated, with capital stock of \$75,000, for the manufacture of cotton goods. The incorporators are Messrs. J. M. Splawn, L. P. Epton, M. P. Burnett, J. P. Stevens and T. R. Trimmer, the parties lately noted as forming a mill. It is proposed to build a mill to be equipped with 5000 spindles for the manufacture of 6s and 16s yarns, and the company expects to start in running day and night.

To Have 20,000 Spindles.

Some weeks ago it was announced that a mill had been projected at Belton, S. C. Lately plans have been formulated for the organization of a stock company and the early erection of the plant. The new mill will have an equipment of from 15,000 to 20,000 spindles, and its product is to be fine goods. Those interested are headed by Messrs. E. A. Smyth of the Pelzer Manufacturing Co. of Pelzer, S. C., and Mr. F. J. Pelzer of the same company.

To Add 8000 Spindles.

The stockholders of the Henderson (N. C.) Cotton Mills met on April 27 and authorized an addition of 8000 spindles to their plant. The present main building will be extended and enlarged one-third its size in order to make room for the additional machinery proposed, and this will give the mill a total of 15,000 spindles and 204 looms. The enlarged plant will consume 5000 bales of cotton per annum and employ 300 operatives.

To Manufacture Its Yarns.

The Excelsior Knitting Mills of Union, S. C., is about to expend probably \$60,000 on improvements. The company will erect a two-story brick addition and put in knitting machinery, increasing its capacity to 1400 dozen pairs of hose daily. There will be purchased and put in place also 5000 spindles and dyeing plant, so that the mills can produce and color its yarns.

Textile Notes.

Reports say that Mr. F. S. Royster of Tarboro, N. C., contemplates the erection of a cotton mill.

There is some talk of a cotton mill being erected at Aberdeen, Miss., and Joseph W. Eckford is interested.

The Raleigh Cotton Mills of Raleigh, N. C., has installed 2736 new spindles, giving the mill 13,536 in all.

It is reported that the Henderson Knit-

ting Mill Co. of River Falls, Ala., is installing a new \$60,000 plant.

The Union Knitting Mills of Union, S. C., is enlarging and improving its plant, a dyeing-room and addition to thread-room being included.

The \$30,000 worth of improvements for the Huguenot Mills, Greenville, S. C. (mentioned last week) will include 1800 new spindles, sixty-three looms, pickers, etc.

A company is under formation at Greensboro, Ga., the capital stock to be \$60,000 and \$15,000 in bonds to be issued. William R. Jackson and E. A. Copeland are interested.

The Robbins Manufacturing Co., noted last week as incorporated at Goldsboro, N. C., intends to install 1500 spindles and forty to fifty looms for the manufacture of batting and coarse cloth.

It is proposed to organize the Columbus (Ga.) Manufacturing Co. for the erection of a cotton factory. Messrs. Butts & Cooper, M. H. Lee, T. A. Marcum, J. A. Kirven and others are interested.

A New York syndicate is said to have definitely decided to invest \$10,000,000 in New Orleans, one of the enterprises to be a cotton-linting factory to be capitalized at \$1,000,000. Mr. Alexander Konta of St. Louis, Mo., is said to represent the parties.

The Blue Ridge Knitting Co. of Hagerstown, Md., has been incorporated, with capital stock of \$25,000, to continue the business of Mr. S. H. Weiheymayer. Jacob Roessner is president, and S. H. Weiheymayer, secretary. Philadelphia parties become interested.

The Camden (S. C.) Cotton Mills will rebuild its dam, which has been unused for two years, and expects to develop 350 horse-power. The steam plant that has been in use during the period mentioned will be abandoned when the new dam is completed. This mill is one of 10,000 spindles and 300 looms.

The Abbeville (S. C.) Cotton Mills will temporarily roof their addition now building and install looms to enable it to complete soon an order for 2,000,000 yards of goods. Later on the addition will be completed and fitted with 15,000 spindles, giving it nearly 30,000 in all.

Col. C. C. Harris of Decatur, Ala., writes that parties, but not of New York, are now negotiating for the purchase of the old rolling-stock building at Decatur, as lately referred to. The parties propose establishing an extensive cotton manufactory if the deal is closed.

Messrs. C. A. Ensign, R. P. Brooks and J. W. Newton have incorporated the Trion Manufacturing Co. of Forsyth, Ga., and will erect at once the knitting mill lately noted as to be established by them. The capital stock is placed at \$15,000, with privilege of increasing to \$150,000.

A company will be formed to build and operate the silk mill at Roanoke Junction, N. C., reported last week. Contract for the construction of necessary building has been awarded to Emory & Driscoll of Weldon, N. C., by Sam. F. Patterson of Roanoke Rapids, N. C., the manager of the enterprise.

The Louisiana Cotton Mill Co. of New Orleans, La., reported last week as incorporated, intends to manufacture duck, sell cloth and awnings. This company succeeds the New Orleans Cotton Mills Co. Contracts will be made now for an installation of 3000 additional spindles, making 4500 spindles in all; also will put in \$30,000 worth of machinery for making duck and awnings. Ernest V. Reiss, secretary, is also asking for estimates on linen machinery.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Oil-Mill Superintendents.

The sixth annual convention of the Oil Mill Superintendents' Association will be held at Waco, Texas, on June 13, 14 and 15. The subjects to be discussed are the filtering and settling of crude oil, by N. B. Koerper; press cloth, by George C. Walsch; tests of oil and meal, by R. S. Schumacher; cooperage, by H. F. F. Theissen, and the proper handling of refuse matter, by George T. Parkhouse. Mr. George T. Parkhouse is president, and Gustav Baumgarten is secretary of the association.

The Market for Cottonseed Products.

New York, N. Y., May 10.

Under a decreasing demand, together with accumulating supplies, the cotton-oil market is easier. With exporters still out, and also the late chief purchaser, the market is weakening as arrivals increase the already large accumulations of local stocks. It is asserted by storage companies that there is no further regular oil storage capacity available at this point. It cannot be denied that the statistical position is still strong, but producers are tiring, and concessions from late quotations are heard of. Generally, buyers and sellers are apart, and not until an improvement in lard as well as foreign demand takes place can we expect important betterment. The lard market is materially lower than a week ago, July delivery, Chicago, being quoted at 5.02½ cents. It would appear, however, that the present depressed condition of the lard market is an artificial one, and that the time is at hand when natural influences will control the future of the product. Tallow is slow and easy at 4 1-16 cents, New York city make. The continued arrivals of cotton oil from the South is a matter which is causing not a little surprise in the trade here, seeing that the prevailing opinion heretofore has been that stocks were not only light, but that mills had nearly all sold ahead. It has been generally conceded that in many parts of the oil-producing sections of the South stocks were exhausted and production ended for the season. "Yet," said an authority, "news by letter and otherwise has been coming in this week from crushers that they are at work again and expect to increase their production from 15 to 25 per cent. For instance, mills with an annual capacity of 7000 barrels say they will have 1000 to 1500 barrels more to sell. With seed at late prices and the present price of crude here there is a big profit in crushing, and where any seed is left fit for crushing it will not go for fertilizers, as a barrel of crude costs about \$8.75 laid down in New York, and will bring about \$11, leaving \$2.25 per barrel profit. Hence the supply is proving much larger than expected by the producers themselves. There have been 4000 barrels sent to store from current receipts this week, and scarcely anything taken out or shipped. Included in sales were 400 barrels prime and 500 barrels off yellow, local." With regard to foreign consumption of cotton oil, reports from Europe are to the effect that compound lard is in good demand. Not only this, but cotton oil, it is announced, is going more into use for soap purposes than at any previous period. All this would indicate that foreigners are bent upon allowing their stocks to run as low as possible before obtaining new supplies from this side, the possibility of lower

prices prevailing in the meantime not being lost sight of. We quote: Crude, 20½ to 22 cents; crude, loose f. o. b. mills, 18½ to 19½ cents; crude, loose f. o. b. mills, 14½ to 17½ cents; summer yellow, prime, 25½ to 26 cents; choice summer, 26 cents; off grades summer, 24 to 25 cents; yellow, butter grades, 27 to 29 cents; white, 28 to 29 cents; winter yellow, 28 to 29 cents, and salad oil, 29 to 30 cents. English refined cotton oil, Liverpool, is quoted at 15s. 3d.

There is nothing new in the meal market with regard to price or demand.

Cottonseed-Oil Notes.

The Campobello Oil Mill Co. of Campobello, S. C., has been organized, with J. M. Caldwell, president, for the erection of a 20-ton oil mill. The company wants prices for machinery.

At a recent meeting of the stockholders of the Fort Worth Cotton Oil Mill Co. of Fort Worth, Texas, the following officers were elected: President, H. L. Scales of Corsicana; vice-president, R. K. Irwin of Waxahatchie; treasurer, N. Harding of Fort Worth.

The Honea Path Oil Mill Co. of Honea Path, S. C., was incorporated last week, with a capital stock of \$15,000. The incorporators are W. A. Strother of West Union, R. M. Richardson of Seneca, J. F. Moore, J. C. Milford, J. V. Kay, T. H. Brock and C. E. Harper of Honea Path.

In New Orleans the market for cottonseed products is quiet, with shipments to domestic points light. Stocks of oil are light, and the market steady for all desirable lots. Cake and meal is moving in a foreign export direction, and values firm. Receivers' prices are quoted as follows: Cottonseed, nominal per ton of 2000 pounds delivered on river bank from New Orleans to Memphis for good sound seed; cottonseed meal jobbing per carload at depot, \$17 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$19.50; oilcake for export, \$19.50, new crop, per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, off crude, 15 to 16 cents per gallon loose f. o. b. tanks here; in barrels, 17 to 18 cents; cottonseed hulls delivered per 100 pounds, according to location of mill, 15 to 20 cents; linters, according to style and staple—A, 2¼ cents; B, 2½ cents; C, 2½ cents; ashes, none; refined cottonseed oil, strictly prime in barrels per gallon at wholesale or for shipment, 21 to 23 cents for export; off refined cottonseed oil, 21½ to 22 cents for steamer.

Water-Power Development.

Announcement has been made of an extensive water-power-electrical development to be instituted near Gainesville, Ga. Mr. D. E. Evans of the Gainesville, Hall County & Street Railroad Co. informs the Manufacturers' Record that he and associates have formed a stock company with capital of \$100,000 to undertake the work, and they will build a dam thirty feet high, which, it is estimated, will cost \$30,000 and develop 4000 horsepower. At first only sufficient turbine water wheels will be installed to develop 2000 horse-power, and this power will be transmitted electrically to Gainesville for the operation of street-railway lines and manufacturing industries. A new electric plant will be erected for this transmission. Estimates on the machinery, such as turbine water wheels, electrical generators, wire, etc., will be received from manufacturers. The company will also issue \$150,000 of first-mortgage bonds on the plant.

Mr. J. L. Hill and associates of Richmond, Va., contemplate the erection of a knitting mill.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., May 11.

In the local phosphate market the demand for rock is improving, and, in sympathy with other fertilizer ingredients, there is a better tone in the general trade. There has been a good inquiry during the week for Florida, South Carolina and Tennessee phosphate rock, and several sales were reported. The market at all points of production is decidedly stronger. South Carolina rock is in good demand, both for domestic and foreign account, and values very steady. In Florida shipments from the ports continue liberal, and the development of various deposits throughout the Florida phosphate belt is quite vigorous. High-grade rock at the mines is firm at about \$6 per ton, and pebble rock from \$3 to \$3.50 per ton. The activity in the Tennessee phosphate field continues without interruption, and the market is very steady. At Mt. Pleasant shipments of rock are liberal, and the demand from both domestic and foreign sources is good. Prices are firm at \$3.75 to \$4 per ton for 78 per cent. rock for export, and \$3.50 to \$3.75 per ton for 75 per cent. rock for home consumption. The following phosphate charters were reported during the week: Bark Doris from Punta Gorda, Fla., to Alexandria; British steamer King Edgar, 1610 tons, and Norwegian steamer Bogstad, 1981 tons, from the Gulf to Japan on private terms, September-October, and British steamers Hexam, 1046 tons, and Nithsdale, 1198 tons, from a Southern port to the United Kingdom or Continent on private terms.

Fertilizer Ingredients.

The market for all leading ammoniates is characterized by a stronger tone, with a better inquiry from leading manufacturers. Were the offerings more liberal a better volume of business would result. Stocks of blood and tankage in the West are light, and are firmly held at quotations. There is a good inquiry for blood from exporters, but the home demand being so decided, operations in the foreign shipment of blood are somewhat restricted. Sulphate of ammonia is firmly held, and offerings are light at full quotations. Nitrate of soda is freely offered for prompt delivery, and values are steady.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).	\$2 87½ @	2 90
Nitrate of soda.....	1 70 @	1 72½
Blood	1 95 @	2 00
Hoof meal.....	1 75 @	1 77½
Azotine (beef).....	1 90 @	—
Azotine (pork).....	1 90 @	—
Tankage (concentrated)...	1 67½ @	1 70
Tankage (0 and 20)...	1 77½ @	1 80 & 10
Tankage (7 and 30).....	17 00 @	17 50
Fish (dry).....	20 00 @	—
Fish (acid).....	12 00 @	—

Phosphate and Fertilizer Notes.

The directors of the Laurens Oil & Fertilizer Co. of Laurens, S. C., at a meeting on May 2 declared an annual dividend of 15 per cent.

The Pharr Phosphate Co. property in Polk county, Florida, was sold at public auction at Bartow on the 1st inst. for \$40,000 to E. C. Stuart. This plant will be put in operation at once.

L. P. Jumeau, manager of the Leon Laurant Phosphate Co., near Inverness, Fla., has leased the phosphate lands of the Florida Orange Canal & Transit Co., in Citrus county, and will erect a plant for their development.

Messrs. J. M. Lang & Co. of Savannah report the shipments of Florida phosphate rock from that port for the month of April as follows: Steamship Birdswold for Rotterdam with 3382 tons and

Hamburg with 728 tons, and steamship Tivoldale for Hamburg with 4435 tons, making a total of 8545 tons.

The Bryant Fertilizer Co., was incorporated at Alexandria, Va., last week, with a capital stock of \$50,000. The officers are Herbert Bryant, president, and William Bryant, secretary and treasurer. The directors are Herbert Bryant, N. P. T. Burke, Francis L. Smith of Alexandria, and Clarence C. Whiting of Baltimore, Md.

The coastwise shipments of phosphate rock from the port of Charleston, S. C., last week were as follows: Schooner Fannie Brown for Elizabethport, N. J., with 776 tons; barge Maria Dolores for Norfolk with 700 tons; schooner Annie C. Grace for Barren Island with 650 tons; schooner Isaac T. Campbell for Boston with 805 tons, and steamship S. T. Morgan for Richmond, Va., with 500 tons and 1800 tons of acid phosphate.

Phosphate shipments at Port Tampa continue very active, and the business of the present month will be very heavy. The schooner C. S. Glidden sailed on the 3d inst. for Baltimore with 1800 tons of pebble from the Palmetto Phosphate Co., and the schooner Woodward Abrahams for the same port on the 5th inst. with 1020 tons of pebble from the same company. The schooners Horace Macomber and George A. McFadden and steamship Aquilega were loading phosphate cargoes on the 5th inst.

The phosphate industry in Hickman county, Tennessee, is taking on increased activity, and the opening up of four new mines near Centerville has advanced the price of phosphate territory very materially. It is stated that land in that section was sold last week at \$300 and \$400 per acre that twelve months ago would not have brought \$4. The Meridian Phosphate Co. of Meridian, Miss.; Hudson Phosphate Co. of Mobile, Ala.; J. D. Aydelotte & Co., are new companies that have commenced mining rock in Hickman. Three other companies are organizing and will commence operations in a few days. The average daily output of phosphate rock in Hickman county now is about 1000 tons.

The regular monthly meeting of Gulf coast lumbermen was held last week in Mobile, Ala. The meeting was called to order by A. S. Benn, who was chosen chairman, with W. J. Kilduff, secretary. There were present the following: Wyatt Griffin, J. L. Dantzler of Moss Point, Miss.; J. W. Black, A. S. Benn, A. J. Spencer, J. C. Miles of Mobile, Ala.; H. H. Patterson, Atmore, Ala.; M. L. Davis, Oak Grove, Ala.; J. S. Otis, Logtown, Miss.; J. D. Hand, Dolive, Ala.; E. W. Manahan and W. A. Robinson, Chicora, Miss., and F. L. Wagar, Wagar, Ala. The export manufacturers present discussed the timber situation, and those present were unanimous in their testimony that the industry was in a very satisfactory condition. A motion was made that timber forty feet and up to fifty feet in length be quoted at \$3 above ordinary prices, and that all from fifty and upward at \$5 above the ordinary lengths. The motion, after some discussion, was carried. The price of South American lumber schedules was placed at \$11 net, and Cuban schedules at \$10.50. The meeting adjourned to convene the first Wednesday in June.

The paper read at the February meeting of the American Institute of Mining Engineers by Mr. Charles Catlett of Staunton, Va., on the coking in beehive ovens of the coals of the New River district, West Virginia, has been republished in pamphlet form from the transaction of the society.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.**Baltimore.**

Office Manufacturers' Record,
Baltimore, Md., May 11.

In the local lumber market the volume of business has been only moderate during the past week, and the demand, while steady, shows no marked increase. Receipts are generally light, and stocks about ample for the demand, which applies more especially to yellow and white pine. In North Carolina pine the movement is fair, but in kiln-dried lumber stocks are generally light, and in air-dried there is a fair supply, about ample for the demand, at the moment. There has been a better demand during the week for kiln-dried North Carolina pine from foreign sources, and several large orders have been filed. In white pine there is a fair demand, and values are generally firm. The hardwood trade is better now than it has been for some time, especially in the foreign export line. Baltimore shippers regard the outlook as favorable, and the shipments this week from this port and Norfolk have been larger than usual. The domestic trade in hardwoods is good, and from out-of-town buyers there is an active inquiry. The scarcity of stocks of hardwoods throughout the milling sections in Virginia, West Virginia and Tennessee restricts operations to a great extent. Values continue to rule firm and higher for desirable lots of oak, walnut, poplar, ash and other woods.

Norfolk.

[From our own Correspondent.]
Norfolk, Va., May 8.

The local lumber market continues fairly active, and the volume of transactions seems to show a marked increase, the demand being quite pronounced for nearly all grades of North Carolina pine. The situation throughout the milling sections of the North Carolina pine belt is regarded as most promising, inquiries from all sections being received, while manufacturers have their files well supplied with orders. Kiln-dried stuff stocks are somewhat reduced, orders being in certain cases difficult to fill at the moment. At a meeting of the members of the North Carolina Pine Association, held in this city last week, the rates on lumber were advanced, the increase ranging from 50 cents to \$1 per thousand feet, according to the grade. This increase was deemed necessary on account of the demand for rough and dressed lumber, both for home and export account, and the small supply on yards and at mills. There has been great activity in shipments, both by rail and water, during the past week. Lumber freights are firm, with a moderate offering of desirable tonnage. Last business was a charter of schooner to New York with box shooks at \$7, and lumber on deck at \$2.50.

Savannah.

[From our own Correspondent.]
Savannah, Ga., May 8.

Lumbermen in this section are now enjoying a fairly active demand for lumber and other wood products. The volume of trade is showing considerable expansion, and prices are firm and higher throughout the general list. Reports from all milling sections are very favorable, and all along the several lines of railroads entering this city saw mills are very busy, being well supplied with orders. On Saturday last the market closed very steady, and at Brunswick the tone of trade throughout

the lumber market was reported active and firm, with shipments increasing. The shipments of lumber during the week from this port amounted to 2,106,920 feet, of which 1,150,000 feet went to New York, 559,467 feet to Baltimore and 397,453 feet to Philadelphia, besides over a million feet by barges to Havana for government purposes. The offering of desirable vessels for carrying lumber is limited, and rates are firmer. Last business reported was at 16 3/4 cents for ties from Brunswick to Philadelphia, and lumber from Savannah to New York at \$5.50.

Mobile.

[From our own Correspondent.]
Mobile, Ala., May 8.

The week under review has shown a very decided increase in the volume of business in all avenues of the lumber and timber market. The price of timber is steadily advancing, and the foreign demand is active, with prices firm at present quotations. Hewn timber may be quoted today at 13 1/2 to 14 cents, with sales of an exceptionally fine lot of sixty-eight pieces at 15 1/2 cents per cubic foot, and a lot of ninety-two pieces at 15 cents. Sawn timber is quoted at 12 1/2 to 13 cents per cubic foot. Cypress logs are in good demand at 7 to 10 cents per cubic foot. Saw logs are quoted at \$7 per thousand feet. The situation in lumber is said to be very full of promise, and manufacturers are generally encouraged by the outlook. Last week a large meeting of Alabama and Georgia lumbermen was held at Montgomery, and the situation of the lumber industry thoroughly discussed. It was stated at the meeting that the mills were loaded down with orders, and prices were from \$1 to \$3 higher than ninety days ago. Prices were advanced by the unanimous decision of those present \$1.50 per thousand on all grades. The activity among timbermen is also a notable fact, and at a meeting of Gulf coast lumbermen last week it was decided to advance extra lengths of timber from \$3 to \$5 above ordinary prices. South American schedules on lumber were placed at \$11 net, and Cuban schedules \$10.50 net. During the past week the shipments of lumber amounted to 1,560,930 feet, of which nearly 1,000,000 feet went to Havana, Cuba. The total shipments of lumber from September 1, 1898, to May 5 amounted to 46,719,375 feet, against 37,133,035 feet last year. In sawn timber 180,856 cubic feet of sawn timber and 2632 cubic feet of hewn were shipped to the United Kingdom. On the 4th inst. the first shipment of oak lumber from this port, amounting to 500,000 feet, was made to Rotterdam, sawed by the Creelman Lumber Co. at its plant in Washington county.

Beaumont.

[From our own Correspondent.]
Beaumont, Texas, May 8.

Throughout every department of the lumber industry in this section there is no diminution in the volume of business. Saw mills in the Beaumont section have all they can do to fill orders, and the demand from the interior, as well as from points beyond the State, is all that can be desired. The local mills are very busy, the output from the Beaumont Lumber Co.'s mill for the month of April aggregating 3,500,000 feet of lumber, most of which was shipped direct by rail, very little going to the yards. Recent rains have had a good effect upon the general trade in this section, and now that good crops are assured the lumber industry, as well as others, will continue to show an increased volume of transactions. The demand for lumber from foreign sources continues to improve, and exporters view the outlook as promising, while business

at Sabine Pass is at the moment showing some remarkable features. The prospects at the Pass for a great expansion in the foreign export trade are encouraging. The Southern Pacific Railroad is improving its track from this city to Sabine Pass and the terminals of the company are being conditioned for an extensive traffic in the near future. It is stated that not alone in lumber and timber, but in cotton, there will be a large shipping trade inaugurated, while the imports of foreign as well as domestic goods will hereafter show a remarkable increase. The government has selected engineers to make a resurvey of Sabine lake, with a view of a ship channel to be constructed from Sabine Pass to the mouth of the Neches river, on which river this city is situated. It is said the engineers will recommend the channel without making a resurvey.

Lumber Notes.

The Cummer Lumber Co.'s mill at Norfolk, Va., last week in sixty-five and one-half hours' working time cut 4708 logs, making 676,087 feet of lumber, or an average of 113,540 feet daily.

The large planing mill, box and crate factory owned and operated by F. G. Elliott at Delmar, Del., was destroyed by fire on the 5th inst. Mr. Elliott's loss will reach \$5000, with no insurance.

The Manteo Lumber & Manufacturing Co. of Dare county, North Carolina, was incorporated last week, with a capital stock of \$10,000. The incorporators are W. J. Griffin, R. W. Smith and J. T. Kenton.

The large planing mill of Eanes & Hargrove at Petersburg, Va., was destroyed by fire on the 2d inst. The entire building, a large lot of unfinished work and 50,000 feet of lumber were destroyed; total loss \$10,000, with no insurance.

A conveyance of several thousand acres of pine timber land was made in New Orleans last week by the Pack Lumber Co. of Cleveland, Ohio, to the Georgetown Lumber Co. of Alexandria, La., for which the latter company pays \$24,000.

The Gallipolis Lumber Co. of Warren, Jackson county, West Virginia, was incorporated last week, with a capital stock of \$25,000. The incorporators are E. E. Gatewood, L. B. Shaw, W. H. Billings, A. T. Lashley, O. W. Lashley and Helen K. Shaw of Gallipolis, Ohio.

The Blackstone Lumber Co., chartered at Blackstone, Va., last week with a capital stock of \$10,000, has moved to Newport News, Va. The president of the new company is Mr. P. E. Harris, and the other parties interested are Messrs. W. H. Crawle, G. A. Crawle and R. D. McCarty.

D. W. Williamson & Co. of Indianapolis, Ind., are erecting a veneer factory in Highlandtown, a suburb of Baltimore, Md. The company has purchased two acres of ground, and the foundations have been laid for a building 80x100 feet. About seventy-five hands will be employed.

Mr. J. T. Link has just located at Scale, Ala., and with a large force of hands is about to enter largely into the timber industry. He will take his force into the Uchee swamp for the purpose of getting out white oak lumber, which will be shipped to Barcelona, Spain, to be made into barrel staves.

The Keyser Door & Box Co. was chartered last week, with a capital of \$500,000. The incorporators are Samuel E. Slaymaker and two others of Philadelphia, Martin Lane of Delaware and Sidney Van-Awker of Oswego, N. Y. The plant of the company will be located at Keyser, W. Va.

The plant of the Wood Bros. Planing Mill Co. of Wheeling, W. Va., was sold at auction last week to John A. Howard and T. S. Riley for \$11,350. The value of the entire plant was estimated at \$29,000. The purchasers represent practical planing-mill men who will shortly place the plant in operation.

The lumbermen of Alabama and adjoining States met in Montgomery on the 5th inst. and established the following prices: For first and second rift flooring, heart, \$25; first and second rift flooring, \$19.50; star rift flooring, \$16. This is an advance of about \$1.50 per thousand. They have more orders than they can fill.

The first oak lumber ever exported from Mobile was loaded on steamship Lindisfarne on the 3d inst., which cleared and sailed on the 3d inst. for Rotterdam. The shipment consisted of 500,000 feet shipped by the Creelman Lumber Co. of Mobile, which has a large hardwood plant in Washington county, fifty miles north of that city.

Mr. C. E. Martindale, a prominent lumberman of Irwin county, Georgia, has purchased a large body of timbered land lying between Sparks and Nashville, Ga., and purposes building a railroad between the two points. He will remove his saw-mill plant in Irwin county to his timber in Berrien county as soon as the new road is completed.

The owners of the Florence Wagon Works at Florence, Ala., have decided to continue operating their extensive plant, and are now at work making extensive improvements in every department of the works. Several carloads of machinery are being put in place, and the old machinery rearranged. These improvements will give the factory a capacity of fifty wagons per day.

Franklin H. Head, N. K. Fairbank, Charles E. Perkins and the estate of Wirt Dexter are about to conclude negotiations for the sale of a 100,000-acre tract of pine timber land in Vernon and Calcasieu parishes, Louisiana, to a syndicate of Michigan lumbermen headed by Delos Blodgett of Grand Rapids. The sale involves a consideration of between \$600,000 and \$700,000.

The Porterfield Lumber Co. at Pearisburg, Va., with W. E. C. Marriman, president, and F. F. Farrier, secretary; W. E. C. Marriman, treasurer, and E. B. Younken, general manager, has just been incorporated, with a paid-up capital stock of \$25,000. The company has purchased the timber on 13,000 acres of land on Big Stony creek, and will begin operations in a few days, using the Big Stony Railroad in shipping lumber to market.

The Beaver Creek Lumber Co. and the Blackwater Lumber Co., which operate extensive lumber mills at Davis, W. Va., have granted their employees an increase of 10 per cent. in wages. About 1000 men are employed by these companies. Other companies along the line of the West Virginia Central Railroad will also give increase in wages. One day last week the Blackwater Lumber Co. sawed 260,000 feet, beating its previous record of 60,000 feet.

The latest manufacturing enterprise to be established on the line of the Gulf & Ship Island Railroad is the Native Lumber Co. of Howison, Miss., with a capital of \$75,000. The company is composed of the following well-known parties: J. L. Dantzler, L. N. Dantzler, G. H. Houze, Henry Colmer, George Bower, Alexander McInnis, Joseph Boseman and John Albert. The milling plant of the company at Howison will be one of the finest in South Mississippi, and will have a daily capacity of 100,000 feet of lumber.

MECHANICAL.

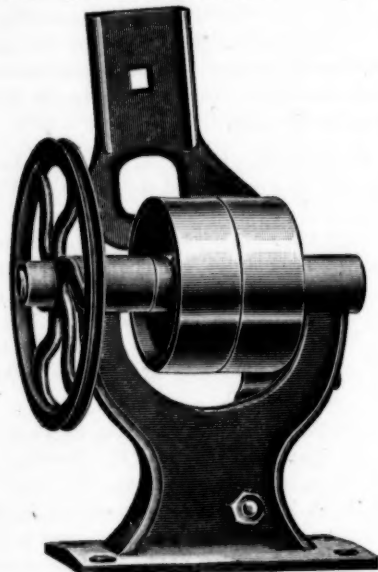
Countershaft and Drill.

This is a new countershaft suitable for all users of small machinery. The flat pulleys are three inches in diameter, and are for a one-inch belt. The bearings are



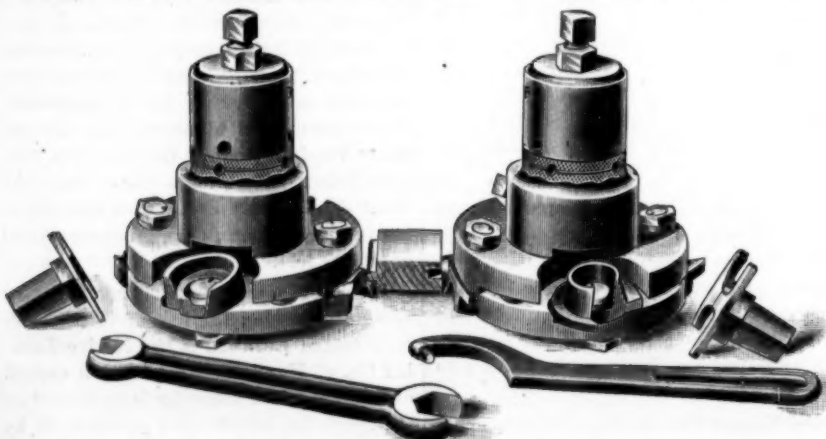
NEW SENSITIVE DRILL.

longer than is usual on a small machine of this class, and will run a long time with but little wear. It is self-contained, four screws holding it to the wall, floor or ceiling, as may be desired.



NEW COUNTERSHAFT.

The new sensitive drill illustrated has been placed upon the market in response to a call from manufacturers of small hardware, jewelers and others desiring a well-made, accurate machine at a low



THE SHIMER EXPANSION HEADS, MADE WITH 4, 6 OR 8 BITS.

price. It is especially designed for manufacturing operations, and sacrifices none of the good features of the larger drills usually employed on this class of work, and also has peculiar advantages of its

own in the way of lightness, good wearing qualities and convenience.

The spindle is counterbalanced by a concealed spring, and is not affected by the tension of the belt. The belt pulley runs on an independent bearing, thus relieving the spindle from the side pull. The feed lever is so proportioned as to be very sensitive to resistance at the point of the drill, thereby reducing the danger of drill breakage. The table is adapted for holding jigs to accurately locate the position of holes in the work, and several machines can be set up, each fitted with jigs for separate operations, the low price making this cheaper than changing the jigs on one machine.

The guide pulleys are arranged to reverse, so that the belt can be led from below or above, as circumstances demand. The chuck takes drills from zero to one-eighth inch in diameter, is furnished with the machine and is included with the price. A hole can be drilled in the center of a three-and-three-quarter-inch circle, and the distance from the chuck to the table is three and three-quarters inches.

These machines are manufactured by the Lord Bros. Manufacturing Co. of Tilton, N. H.

Up-to-Date Tools.

Progressive planing-mill men are always on the alert for tools that will do better work and more of it than the ones they have been using. For the benefit of this class we illustrate the "up-to-date" Shimer cutterheads, with expansion. These tools have given much satisfaction, and favorable reports from users in all parts of the country are constantly being received by the manufacturers.

These cutterheads are being made with four bits, six bits or eight bits in line of cut, to meet the requirements of all grades of lumber and the fast feeds now being employed on matching machines.

The advantages to be derived from using an expansion head should be apparent to every planing-mill man.

It is a well-known fact among practical men that in changing from dry lumber to that partly dry, or of a different variety, the tongue and groove will not be the same, and the bits must be expanded or contracted to suit. Here is where the expansion comes in to such advantage. Without taking the heads off the spindle, the bits can be adjusted to suit the different kinds of wood and in a second of time. For regulating the adjustments a V-jointed nut on the central hub is used. The movement of the nut one notch to the right registers larger on the tongue or groove one-third of one-sixty-fourth of an inch. A movement of the nut three notches to the right or left will make the tongue or groove heavier or

lighter by one-sixty-fourth of an inch. These adjustments affect the lower series of bits only. The upper series of bits set (by means of the top screw) to work with the surface cut of the planer-head,

remain a fixture, the importance of which will be understood when applied to the matching of wainscoting or car siding.

For an all around cutterhead for matching single tongue and groove, the manufacturers recommend their latest expansion heads as the best they have ever produced, and are willing to send them on trial to responsible parties for thirty days. No offer could be fairer than this.

Any further particulars will be cheerfully sent on application. Address the manufacturers, Messrs. Samuel J. Shimer & Sons, Milton, Pa.

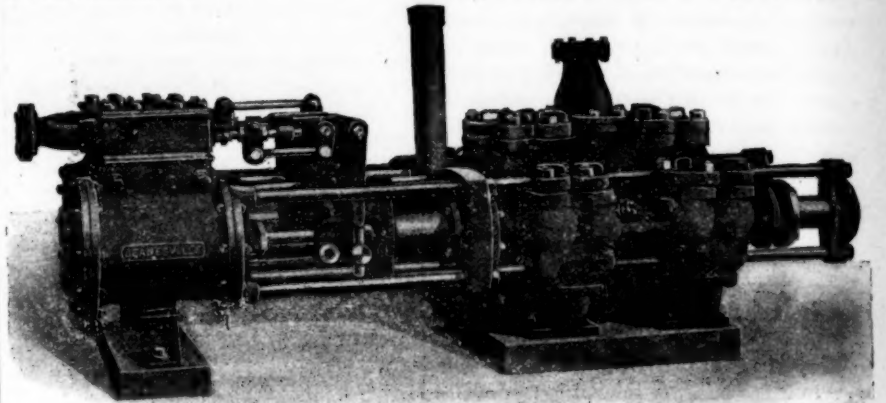


FIG. 1.

An Efficient Pressure Pump.

The hydraulic engineer not only calls for hydraulic pumps to produce required pressure and volume, but specifies features relative to the steam consumption, simplicity, durability, design and material used. In point of fact, the demand is one of efficiency.

As the efficiency of a machine complete is dependent upon the working of its component parts, so the design of a modern pressure pump becomes a study of each distinct detail. Figs. 1 and 2 illustrate the latest products of the Jeaneville Iron Works Co. of Jeaneville, Pa. This company has been manufacturing pressure and mining pumps since 1843, and the product herewith shown is the embodiment of their experience in a high-pressure pump.

The general design contemplates a pump for working pressures up to 3500 pounds and for any desired volume, and one which is compact, simple in construction and absolutely safe to perform the necessary work with the minimum attention and repairs. The pumps are constructed for use in connection with

parts and increased cost. These features are cited as follows:

First—With a compound pressure pump greater piston speed can be obtained without shock or jar to the pump or connecting pipes.

Second—A more uniform pressure can be maintained on account of the better control of the action of the steam end. This will be noted as a very important and most desirable feature in any hydraulic system.

Third—The economy in steam consumption as compared with a single-cylinder

pump is so great that this item alone is sufficient to recommend the compound pump in every instance. The pumps are designed with a view of being controlled by variations of pressure in the discharge or by the movement of an accumulator plunger. Thus as the pressure reaches the required limit the pump is automatically slowed down or stopped, as may be desired.

The details of construction are carried out in such a form as produce the general results as are cited above.

The valve areas are usually from 50 to 60 per cent. of the area of the plunger, and the valves proper are constructed with a heavy phosphor-bronze seating and the poppets are arranged with either a metallic face ground or a leather face. The plungers and working barrels are cast on end with close-grained iron of high tensile strength. On pressures of 5000 pounds the castings are made of steel. The pipe connections and valve covers are flanged, and are held in position by hinge bolts.

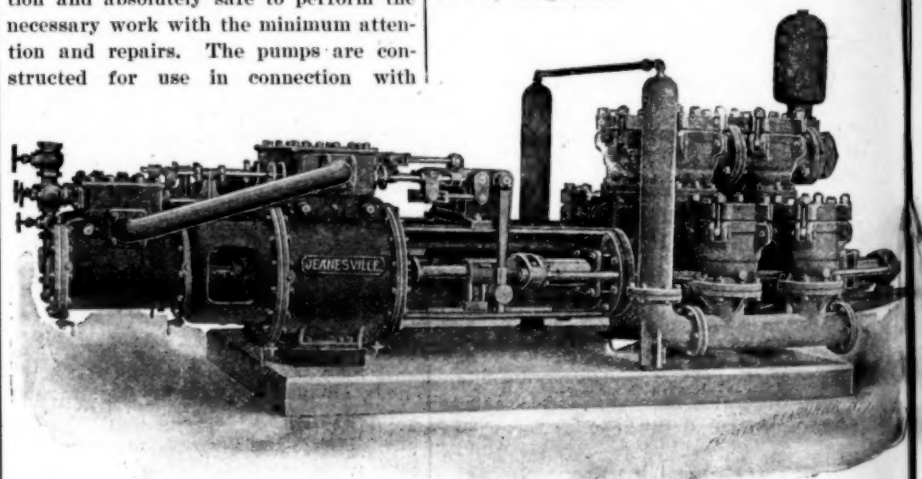


FIG. 2.

hydraulic elevators, accumulators, hydraulic tools, forging presses and oil-mill presses; in fact, any requirement calling for high-pressure work. While these pumps are made with either simple or compound steam cylinders, the one recommended (and generally used) is the compound pattern. While the compounding of the steam end necessarily increases the cost of the apparatus and multiplies the parts for wear, yet the commanding features of such a type of pump are so great as to overrule any objection which may be raised against the multiplicity of

In the large size pumps the valve are in separate chambers or pots. A large vacuum chamber is placed at dead end of suction pipe, which adds materially to the smooth running of the pump at high speed.

The fittings are complete, including wrenches, steam valves, gauges, oilers and spanners necessary to make quick inspection of the parts.

This line of pumps is made in all required sizes, and full literature and drawings will be mailed upon application to the company.

Kitselman Ornamental Fence.

In this day and age of improvement steel is being used more extensively than ever before in almost all lines of manufacture, and in no line have greater strides been made on account of its use than in the manufacture of fencing. Twenty years ago a board or wood picket fence was considered the proper thing for enclosing residences and lawns, but such a fence at the present time looks very much out of place. Nothing detracts more from the beauty of the lawn and surroundings than an unsightly fence, while on the other hand, nothing adds more to the beauty of the residence and lawn than an artistically-designed iron and steel fence. The Kitselman ornamental fence, as illustrated herewith, is such a fence. It is one of twenty-six designs manufactured by Kitselman Bros., Ridgeville, Ind. This fence will recommend itself to those artistically inclined, as well as those who are looking after something substantial. It is a fence that will please the most exacting, and is sold at a price that brings it within reach of all. It is perfect in construction and strikingly ornamental. The pickets are of twisted wire about one-quarter inch in diameter, and with the cable wires are woven in such a way as to provide for expansion and contraction. All posts and railings are made of steel tubing, while the fittings are of malleable iron.

This firm also manufactures and sells coiled spring wire, coiled spring woven-wire farm and poultry fencing in the roll

nal boxes to the face of the journal itself so as to secure perfect lubrication.

There have been numerous mechanical appliances devised for this latter purpose, with varying success, and experiments so far have convinced those interested that perfect lubrication could only be secured by means of an oil bath.

As is well known, the railroads have used for some years, and with some degree of satisfaction, wool, cotton and vegetable fibers and cotton yarns, forming what is termed "waste" or journal packing; this "waste," well saturated with the oil adopted, has served its users well. But that is not enough; the service must be even better than heretofore.

It is claimed that one eminent chemist decided that this old system did just what it was necessary to abolish in order to have perfect lubrication; that is, it wiped the journal most effectively, thus preventing the desideratum.

There has appeared on the market now a method that is claimed to cover all the points that a railroad journal can demand for its perfect lubrication. This method embodies the use of a combination of the very best quality of wool fiber, vegetable fiber and the ever-wonderful asbestos, a material that has come into various uses the world over.

The manufacturer of this material claims that it has been repeatedly demonstrated by actual tests that the new combination will stand up against a car journal with greater elasticity than any other packing. Further, it is stated that its capillary power is greater than other

objectionable weight lifting in operating ordinary swing saws.

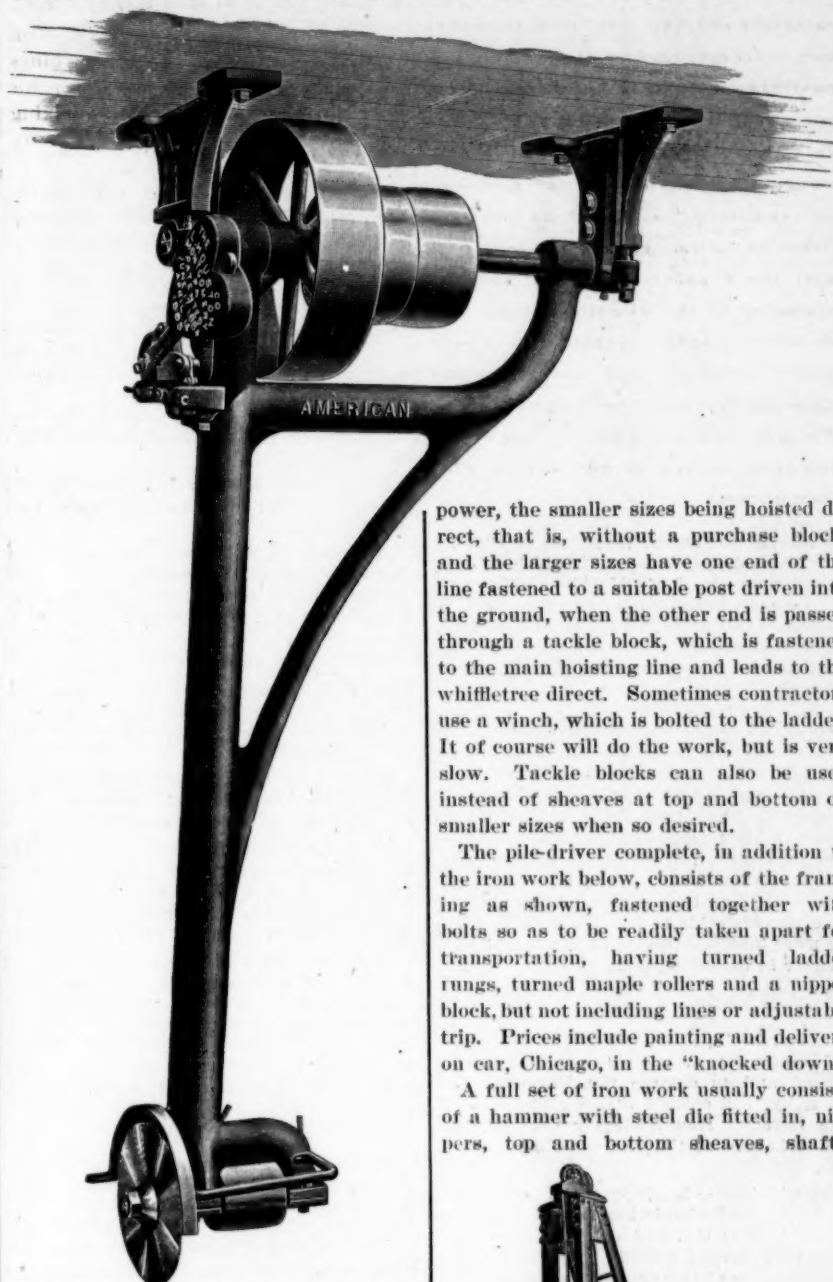
In this machine the operator is not only relieved of lifting the weight of the counterbalance, but it actually aids him in pulling the saw through the lumber, making it as easy to cut off a board thirty inches wide as one four inches wide.

The frame combines strength and rigidity, while it is at the same time light.

Township Pile-Drivers.

In order to meet the demand for a pile-driver for use on small bridges and other light driving at reasonable cost, there has been introduced the machine represented in the engraving. It is made of different capacities, from 500-pound hammer up to 1200 pounds.

The hammer is usually raised by horse-

**IMPROVED SWING OR SLASH SAW.**

It is cast all in one piece, with a cored center, and will stand great tortive strain. The shaft on which the frame swings is stationary, set-screwed in the hangers, as shown in cut. It will be seen that this tends to make it perfectly rigid and not liable to get out of line. The driving pulley and the large pulley on the counter, which runs the saw arbor, are fastened together on a self-oiling sleeve. The loose pulley has also self-oiling bushing. The pulleys are thus all virtually loose on the countershaft. The saw being once properly placed in position remains so, as there are no journals to wear and throw it out of line.

The hangers are arranged to adjust vertically about four inches by means of screws to take up the wear of saw. This adjustment is effected, as will be seen, without the necessity of cutting or splicing belts. The cut shows right-hand saw with position of weight when saw is back of the guide. Regular length from base of hangers to center of arbor seven feet two inches, but can be made any required length, and right or left hand, or to work under table, or to apply to wall, when so specified in order.

For further information and price address the American Woodworking Machine Co. at any of its salesrooms. (See advertisement.)

power, the smaller sizes being hoisted direct, that is, without a purchase block, and the larger sizes have one end of the line fastened to a suitable post driven into the ground, when the other end is passed through a tackle block, which is fastened to the main hoisting line and leads to the whiffletree direct. Sometimes contractors use a winch, which is bolted to the ladder. It of course will do the work, but is very slow. Tackle blocks can also be used instead of sheaves at top and bottom on smaller sizes when so desired.

The pile-driver complete, in addition to the iron work below, consists of the framing as shown, fastened together with bolts so as to be readily taken apart for transportation, having turned ladder rungs, turned maple rollers and a nipper block, but not including lines or adjustable trip. Prices include painting and delivery on car, Chicago, in the "knocked down."

A full set of iron work usually consists of a hammer with steel die fitted in, nippers, top and bottom sheaves, shafts,

**TOWNSHIP PILE-DRIVERS.**

boxes and bolts, one pair No. 1 toggles with bolts, one pair of No. 3 toggles with bolts, bar iron or channel-iron liners with bolts and washers, together with working drawings of the woodwork when desired.

For further particulars address the maker, Vulcan Iron Works, Chicago, Ill.



and the celebrated duplex woven-wire-fence machine (ball bearing and automatic) for taking right into the field or any place and making over 100 styles of woven-wire fence. They were awarded first premium and gold medal on machine, farm and ornamental fencing at the great Trans-Mississippi Exposition. Catalogues will be sent to anyone for the asking.

Lubricating Railroad Rolling Stock.

The close competition that has obtained in recent years in all lines of commercial and industrial activity has been the means of the introduction of many devices for the reduction of cost in the construction of said businesses.

In railroad equipment the improvements that have appeared from time to time have been many and diverse in their character.

One of the most persistent demands in railroad life has been that for an efficient and perfect lubricant for locomotives and cars, the journals of which have always required considerable attention and close watching for the prevention of that bane of the trainmen called a "hot-box."

For many years the motive-power departments of the railroads were subject to much annoyance in their efforts to reduce the expense and trouble of lubricating their equipment on account of the expensiveness and difficulty in securing a proper oil as a lubricant. This was finally overcome, and with that settled, what was of possibly more importance was to find a method and means of properly and economically conveying the oil from the jour-

packings, and that as a consequence the oil bath is practically accomplished. This packing retains on its surface, after being applied to the journal box, the lubricating oil in small pools, or pockets, and the elasticity constantly forcing it up presents this oil continually to the face of the journal, the capillary power gradually drawing the lubricating oil from the bottom of the box to the pools as fast as it is taken by the action of the journal to overcome the friction of the journal and its bearing above. This is claimed to allow the journal to revolve under the heaviest loads with the minimum degree of friction.

One test of this new material was as follows: One application of oil on the packing was used 20,000 miles, and upon examination was found to be in as good condition apparently as when first applied, being well saturated with the oil and standing up well against the journal.

The new "waste" here referred to is known as the "Perfection Journal Box Packing," and is controlled and manufactured by the Franklin Manufacturing Co. of Franklin, Pa.

Improved Swing or Slash Saw.

The engraving presented herewith illustrates a new machine introduced by the American Woodworking Machine Co. and built at the Levi Houston Co. factory, Montgomery, Pa.

The manufacturer describes this as a perfectly counterbalanced swing saw, provided with a patent counterbalance device which practically overcomes the

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted." In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Anniston—Pipe Works.—H. M. Wheeden of Boston, Mass., lately reported as having leased and to enlarge the Hercules Pipe Foundry, will operate it under the name of the Hercules Iron & Supply Co. Address Mr. Wheeden at the Calhoun Hotel, Anniston.

Birmingham—Baking-powder, etc., Factory.—J. Lee Richards has formed the Pekin Tea & Coffee Co., and established at Nos. 1729-1731 Second avenue a plant for the manufacture of catsup, sauces, baking powder, extracts, vinegars, etc.; seven machines will be installed.

Birmingham—Iron Foundry and Machine Shops.—The Caldwell-Watson Foundry & Machine Co. has established a plant.

Birmingham—Engine Works.—The Wilson Manufacturing Co., B. F. Wilson, president, of Chicago, Ill., has, it is reported, decided to remove its \$50,000 engine works to Birmingham.

Birmingham—Steel Plant, etc.—The Republic Iron & Steel Co. (which lately acquired the property of the Gate City and Birmingham rolling mills and furnaces, coal and ore mines, dolomite quarries and railroad of the Pioneer Mining & Manufacturing Co.) will quadruple the steel-making capacity of the Birmingham Rolling Mill, giving it a daily output of 300 to 400 tons, and erect another furnace on its Pioneer properties in order to furnish iron sufficient for the two rolling mills and steel plant.

Decatur—Cotton Mill.—C. C. Harris writes that the accurate facts in regard to the proposed purchase of the old rolling-stock building for cotton-manufacturing purposes is that negotiations are now pending, but not with New York parties. The parties interested do not desire publicity given the matter until a final consummation of the deal is reached.

Eples—Cotton-oil Mill.—A stock company will be formed for the erection of a cotton-seed-oil mill. Address T. V. White.*

Florence—Wagon Works.—The Florence Wagon Works will install additional machinery costing \$5000 to give capacity of 15,000 wagons per year.

Huntsville—Furniture Factory.—The furniture factory of the Spring City Furniture Co. in West Huntsville, which was recently

burned, will be rebuilt by the Huntsville Furniture & Lumber Co., Capt. Jas. A. Ward, president; will employ about 100 operatives.

Mary Lee—Coal Mines, Coke Ovens, etc.—J. Harry Lee of Stephen S. Lee & Son of Baltimore, Md., has leased the property of the Jefferson Coal & Railway Co. at Mary Lee, including 2200 acres of coal lands, with coal mines of 750 to 1000 tons capacity per day, thirty coke ovens, a 600-ton Stein ore washer and a railroad. It is the purpose of Mr. Lee to put the property in full operation, paying particular attention to the coke trade for foundry purposes. This item was reported during the week under Lewisburg.

Mobile—Bottling Plant.—The Moerlein Brewing Co. of St. Louis, Mo., will erect a storage-house and bottling plant in Mobile.

Northport—Trunk and Slat Factory.—The Alabama Trunk and Slat Factory has completed its organization, with W. H. Whitson, president; George W. H. Christian, vice-president; R. S. Cox, secretary-treasurer, and Jacob Krupp, general manager; capital stock \$6000. The factory will soon be completed.

River Falls—Knitting Mill.—The Henderson Knitting Mill Co. is adding a new \$60,000 plant.

Scottsboro—Saw Mill.—James Jordan, Sr., has sold a body of timber land to G. W. Steagall of Tullahoma, Tenn., who will erect a saw mill, as lately reported.

ARKANSAS.

Dermott—Ginney.—The Dermott Ginning Co., lately reported as incorporated by R. L. Woolfolk and others, has purchased machinery for a ginney.

Forest City—Electric-light Plant.—The St. Francis Electric Light Co. has increased its capital stock from \$8000 to \$12,000.

Little Rock.—Chartered: The Polk County Immigration Association, with Andrew Johnson, president; J. D. Shaver, vice-president; E. M. Green, secretary, and C. A. Smith, treasurer; capital stock \$50,000.

Mablevale—Bauxite Mines and Reduction Works.—The Pittsburg (Pa.) Reduction Co. has secured 900 acres of bauxite lands in the neighborhood of Mablevale for \$25,000 from Levi Storthz of Little Rock, and it is understood will erect large reduction works either at Little Rock or Mablevale.

FLORIDA.

Braidentown—Mining and Manufacturing. The Manatee Fuller's Earth Mining & Manufacturing Co. has been formed, with Belmont Tiffany of New York, president, for the construction of a dock 50x100 feet, with a 700-foot approach, to cost \$4000; the machinery for the plant (which has been purchased) cost \$16,000, and will have a capacity of 100 tons per day. The capital stock is \$500,000.

Crescent City—Starch Factory.—C. H. Cash contemplates the establishment of a cassava starch factory.*

Inverness—Phosphate Mines.—L. P. Ju-meau, manager of the Leon Laurant Phosphate Co., has leased the phosphate lands of the Florida Orange, Canal & Transit Co. in Citrus county and will erect a plant for their development.

St. Augustine—Land Improvement.—John Denham Palmer, H. Reiman Duval, J. R. Parrott and J. E. Ingraham have incorporated the Perrine Grant Land Co. to deal in real estate, construct wharves, docks, bridges, etc.; capital stock \$100,000.

GEORGIA.

Atlanta—Asbestos Mine.—The asbestos mine at Sall mountain, in White county, has, it is reported, been sold for \$200,000 to Bancroft & Keenrick, mining engineers of London, England.

Cartersville—Ocher Mill.—Mr. Hull of Comer, Hull & Co. of Savannah will erect a \$10,000 ocher mill at Cartersville for the development of ocher lands recently purchased.

Columbus—Cotton Mill.—The Columbus Manufacturing Co. will be organized for the erection of a cotton mill. Butts & Cooper, M. H. Lee and others are mentioned as having subscribed to the capital stock.

Dahlonega—Gold Mines.—The Dahlonega Consolidated Gold Mining Co. will appropriate \$150,000 for a plant to develop its mines.

Danielsville—Gold Mines.—W. E. Sudlow has purchased 630 acres of gold-mining lands

in Madison county near Danielsville from Thomas Bailey, and as soon as the necessary machinery (which will be operated by water-power) can be installed the mine will be developed on an extensive scale.

Decatur—Electric-light Plant.—Lawrence Everhart contemplates erecting an electric-light plant (water-power) to furnish about 100 arc lights and 300 or 400 incandescent lights.*

Forsyth—Knitting Mill.—The Trio Manufacturing Co., reported last week as incorporated for the establishment of a knitting mill, has a capital stock of \$150,000. Address C. A. Ensign, J. W. Newton and R. P. Brooks.

Gainesville—Electric-power Plant, Dam, etc.—Efforts are being made for the erection of an electric power-house for street railway and for the construction of a \$30,000 dam on the Chattahoochee river. D. E. Evans may probably be able to give information.

Gainesville—Water-power-Electrical Development.—D. E. Evans (No. 9 E. Spring street), noted last week as proposing the erection of an electric-light plant, writes in reference to his enterprise. Mr. Evans and associates have formed a company, with capital stock of \$100,000, and intend to construct a dam thirty feet high at an estimated cost of \$30,000 and develop about 4000 horse-power; at first sufficient turbine water wheels will be installed to develop 2000 horse-power, and an electric-light plant will be built to transmit it for the operation of an electric-lighting plant for city supply and a power plant for railway. The company will also issue \$150,000 of bonds.*

Gainesville—Telephone System.—Col. H. P. Farrow will construct a telephone line from Gainesville to Dahlonega.

Gibson—Bridge.—Contract will be let on June 6 for the construction of a bridge. Address B. F. Walker, county clerk.

Greensboro—Cotton Mill.—It is reported that \$54,000 has been subscribed for the erection of a cotton mill. It is the intention of those interested to raise \$60,000 and issue \$15,000 of bonds for a \$75,000 factory. Address E. A. Copeland, who will be president of the company.

McDonough—Cotton Mill.—Efforts are being made for the establishment of a \$50,000 or \$100,000 cotton factory. Address J. A. Fouché.*

Waycross—Sewerage System.—Supervising Engineer Chapman has prepared plans for a sewerage system; fourteen miles of pipe will be laid. Address "The Mayor."

KENTUCKY.

Bardstown—Liquor Company.—Thomas S. Moore, R. H. Edelen and Eugene Wilson have incorporated the F. G. Walker Co. to conduct a general liquor business; capital stock \$25,000.

Frankfort—Turnpike.—The Dunn & Dunaway Turnpike Road Co. has been incorporated, with capital of \$1500, by Jas. Dunn and J. W. Dunaway.

Hartford.—Chartered: The Kellar-Morris Company, with a capital stock of \$5000, by Ed F. Morris, F. H. Kellar, Frank Zimmer and others.

Louisville—Acetylene-gas Company.—John Chambers, R. W. Bingham, Henry Chambers, John Tevis and others have incorporated the Southern Acetylene Gas Co., with a capital stock of \$100,000.

Louisville—Lumber Company.—William Hillerman, John Hillerman and others have incorporated the Louisville Lumber Co., with a capital stock of \$10,000.

Louisville—Fire-alarm System.—Frank K. Ludlow, president and general manager of the Protective Fire-Alarm Co. of Cincinnati, Ohio, will ask for franchise for laying conduits and conducting an automatic fire-alarm and messenger service in Louisville.

Louisville—Cigar, etc., Factory.—The Hummel & Vogt Company has been incorporated, with a capital stock of \$30,000, for the manufacture of cigars, cheroots, etc., by George H. Hummel, Rudolph Vogt and C. C. Vogt.

Middlesborough—Iron Furnaces, etc.—Legal transfer has been made of the Watts Steel & Iron Syndicate, Limited, furnaces and property to the Virginia Iron, Coal & Railway Co. of New York city (office in Empire Building, 58 Broadway), recently reported as having purchased same. It is understood that the new owner expects soon to make extensive repairs and operate the steel plant to the fullest capacity.

Midway—Electric-light Plant.—Contract will be let on May 9 for the erection of a municipal electric-light plant. Address Matt Winn, mayor.*

Newport—Machine Company.—The Ross Voting Machine Co. has been incorporated by N. B. Ross of Gilboa, Ohio; Frank G. Kahle, E. L. Frey, Sam Cartwright and M. O. Aguer of Attawa, Ohio; capital stock \$250,000.

Providence—Coal Mines.—The Providence Coal Co. (lately reported) is preparing to install electrical machinery in its mines this summer, and is now settling a battery of boilers, three, eighty horse-power each; W. J. Nisbet, general manager.*

Williamstown—Turnpike.—The Ashbrook Turnpike Road Co. has been incorporated by Wesley Rankin and others, with a capital of \$1000.

LOUISIANA.

Abbeville—Mercantile.—The Abbeville Hardware & Implement Co., Limited, has been incorporated, with Ophellas Bourque, president; John Abshire, Jr., vice-president; James A. Summers, secretary-treasurer, to conduct a general mercantile business; capital stock \$5000.

Crowley—Rice Mill.—The Miller-Norris Canal, Irrigation & Land Co., Limited, J. H. Lewis, Estherwood, La., secretary, contemplates the erection of a rice mill with capacity of 600 barrels per twenty-four hours; has pumping plant that will irrigate 10,000 acres.*

Gueydan—Rice Mill.—The Gueydan Rice Milling Co., Limited, has been incorporated, with R. H. Washburn, president; O. E. Gammill, vice-president, and W. G. Francis, secretary-treasurer, for the erection of a rice mill; capital stock \$40,000.

New Orleans—Cotton Mill.—The Louisiana Cotton Mill Co., Limited, (reported last week as incorporated) will succeed the New Orleans Cotton Mills Co., and install 3000 additional spindles, making altogether 4500 spindles and thirty looms. About \$30,000 additional will be expended for the latest improved machinery in the manufacture of ducks, awnings, etc. The company has all the buildings necessary and 350-horse-power boilers and 225-horse-power engine; Ernest V. Reiss, secretary, 44 Carondelet street.*

New Orleans—Cotton-linting Plant.—Alexander Konta of St. Louis, Mo., representing a syndicate of New York capitalists, will, it is reported, organize a \$1,000,000 company for the erection of a cotton-linting plant in New Orleans.

New Orleans—Laundry.—Henry Loeb has purchased three-story building and will install machinery for steam laundry to be operated as the Crescent City Steam Laundry Co., Limited.

Shreveport—Laundry.—Alva Simpson will establish a laundry.

MARYLAND.

Baltimore—Dry-dock.—William Skinner & Sons Shipbuilding & Dry-dock Co., H. G. Skinner, president, will open bids on Tuesday, May 9, for its proposed dry-dock, which will be 600 feet long and sixty feet wide.

Baltimore—Paving and Construction Company.—Isaac S. Filbert, Hugh Slisson, Frank H. Sloan, L. B. McCabe and James A. Sayer have incorporated the Filbert Paving & Construction Co.; authorized capital \$300,000.

Baltimore—Electric-light Plants.—The Edison Electric Illuminating Co. and the Brush Electric Co. have consolidated and incorporated as the United Electric Light & Power Co., with a capital stock of \$2,000,000; Alexander Brown, Nelson Perin, Josiah L. Blackwell, H. Crawford Black and William T. Dixon, executive committee.

Baltimore—Ginger Ale, etc., Factory.—The Goshawk Ginger Ale Co. will be incorporated for the erection of a plant for the manufacture of non-alcoholic beverages. J. C. McKenna, 401 and 402 Herald Building, is the promoter of the enterprise.

Baltimore—Straw-hat Factory.—George C. Haskell has completed plans for six-story hat factory for Townsend, Grace & Co., previously mentioned; building will be of pressed brick, terra-cotta and steel, and cost \$45,000; contract will soon be awarded.

Baltimore—Novelty Factory.—The Baltimore Ball Bearing Co., for the manufacture of patented novelties, has been incorporated by John W. Woodland, James Woodall, Ralph S. Jackson and William D. Allen; capital stock \$150,000.

Baltimore—Chemicals and Medicine Fac-

tory.—The Borallne Chemical Co. has been incorporated for the manufacture of patent medicines by R. E. Lee Williamson, Robert H. Campbell, Clifford P. Herring, Frank W. Watts and others; capital stock \$5000.

Cumberland.—The Baltimore & Ohio Railroad Co. will erect a new boiler-house, in which will be installed three boilers now in use, and make extensive improvements at the oilhouse.

Ellicott City—Telephone System.—The Citizens' Telephone Co. of Howard county has been incorporated by Louis T. Clark, Frederick H. Bailliere, J. S. T. Waters, William Davis, Jr., and others for the construction of a telephone system; capital stock \$15,000.

Hagerstown—Knitting Mill.—The Blue Ridge Knitting Co. (operated by S. H. Welbenmayer in the manufacture of hosiery) has been incorporated, with capital stock of \$25,000; Jacob Roessner, president; S. A. Suter, vice-president, and S. H. Welbenmayer, secretary-treasurer; with Charles H. Roessner and H. W. Welbenmayer of Philadelphia, Pa., they compose the board of directors; present equipment forty-two knitting machines.

St. Michaels—Shirt Factory.—Pope & Belliere, representing Baltimore (Md.) parties, are investigating with a view of erecting a shirt factory in St. Michaels; about \$5000 will be expended on buildings and fifty machines installed.

Washington, D. C.—Chartered: The Norris Peters Company, to conduct a photographic and lithographic business; capital stock \$150,000; incorporators, Eugene Peters, Daniel Frazier, Paul L. Webb and H. T. Parsell.

MISSISSIPPI.

Aberdeen.—J. W. Eckford is investigating with a view of erecting a cotton mill.*

Aberdeen—Iron Works and Machine Shops. The Powell & Hahn Manufacturing Co. of Covington, Ky., will remove its iron foundry and machine shops to Aberdeen.

Biloxi—Bridge and Paving.—The city will issue \$40,000 of bonds, \$25,000 to be used for paving purposes and \$15,000 for bridging Back bay. Address "The Mayor."

Brooksville—Cotton Gins, etc.—The Brooksville Ginning & Manufacturing Co., capital stock \$5000, has been incorporated by M. Frank, E. Cahn, W. E. Stokes, T. B. S. de Graffenreid, P. W. Strong and D. C. Boyle.

Grenada—Vapor-lighting Company.—Incorporated: The Washington Arc Vapor Light Co., by E. P. Peacock, B. S. Dudley, J. L. Hartshorn, E. L. Gerard and J. L. Finley.

Howison—Lumber Mills.—The Native Lumber Co., reported during the week as incorporated with a capital stock of \$75,000, will establish a lumber mill with a daily capacity of 100,000 feet.

Indianola—Artesian Well.—The county will sink an artesian well. Address clerk of supervisors of Sunflower county.*

Leland—Oil Mill.—The company lately reported as being organized for the erection of an \$80,000 cottonseed-oil mill has been incorporated as the Leland Oil Works by Hermann Goepel, George W. Wheeler, Robert Ernst and others; capital stock to be not less than \$50,000 nor more than \$200,000.

Logtown—Lumber Mill.—Archle Russ and others have purchased the old Goddard lumber mill site and will erect complete new plant of 20,000 to 30,000 feet daily capacity.

Macon—Cotton Gins, etc.—The Macon Ginning & Manufacturing Co., capital stock \$5000, has been incorporated by E. Cahn, M. Frank, P. J. Evans, P. W. Strong and D. C. Boyle.

McComb City—Telephone System.—Incorporated: The Pike County Telephone Co., domiciled at McComb City, capital stock \$25,000, by J. W. Johnson, W. M. White, J. H. Stevens, Jr., and Mrs. M. D. Sanders.

Oxford—Sewerage System.—The city will issue \$20,000 of bonds for the construction of sewerage system. Address "The Mayor."

Tillatoba—Compress.—John Stevens will erect a round-bale compress, as lately reported; capacity sixty bales of cotton per day.

MISSOURI.

Carthage—Mining.—M. C. Berry, C. B. Armstrong, Frank Bennett, F. Gallentine and Leslie Smith have purchased eighty acres of land for mining purposes.

Carthage—Mining Plant.—George M. Sealey will erect a mining plant.

Carthage—Mining Plants.—Illinois parties have purchased from Jas. Luke mining lands for \$5000 and contract has been awarded to George Wright for the construction of three mills to cost \$16,000; George W. Ash, superintendent of construction.

Carthage—Mining Plant.—The Pearl Lead

& Zinc Co. has let contract for erection of new milling plant.

Coffey—Mining.—The Globe Mining Co. has been incorporated, with a capital stock of \$10,000, by G. A. McMillen, J. L. Beeson, George E. Root and others.

De Soto—Hotel Company.—Chartered: The De Soto Hotel Co., with a capital stock of \$8000, by J. F. Walther, G. L. Schleutes, Otto Hermann and others.

Durham—Manufacturing.—The Gravity Level Manufacturing Co. has been incorporated, with a capital stock of \$3500, by W. H. Abell, D. M. Custer and John M. Ward.

Independence—Agricultural-Implement Factory.—Peter Minch, William F. Hall and O. V. Slaughter have formed the Progressive Machinery Co. for the manufacture of Hall's self-feeder, an attachment for threshing machines, straw balers and lawn mowers; twenty-five operatives will be employed.

Joplin—Lead and Zinc Mines.—The Colonial Lead & Zinc Mining Co. has been incorporated, with an authorized capital of \$500,000, by F. J. Hart of Joplin, C. A. Clark, Colon S. Ober and M. S. Williams of Menton, Mass., and Thos. J. Bryant of Medford, Mass.

Joplin—Mining.—The Christian County Mining Co., composed of Dr. E. McCoy, Will Taylor, Frank Howell, Will Woody and W. C. Barnes of Ozark, Mo., and others, have leased and will develop forty acres of land near Joplin.

Joplin—Mining.—S. D. Lanyon, R. J. Clafin, Lee Chick and others have incorporated the Black Diamond Mining Co., with a capital stock of \$2000.

Joplin—Candy Factory.—J. H. Duke & Co. have purchased building and will install machinery for the manufacture of candy.

Joplin—Mining.—Henry W. Brown, James Boyd, Joseph S. Clark, C. G. Davis and W. M. Gordon, all of Philadelphia, Pa., have incorporated the Manheim Mining Co. to conduct a mining business; authorized capital \$100,000.

Kansas City—Plumbers' Supply Factory.—The Sieben Manufacturing Co. (recently reported as incorporated) will manufacture under the several patents of Henry Sieben brass and hard copper castings for electrical work and plumbers' supplies; foundry at 1120 Holmes street.

Kansas City—Distillery.—The National Distastase Co. of Chicago, Ill., will erect a \$160,000 distillery, with a capacity of 2500 gallons of liquor per day, in Kansas City. Forty operatives will be employed and company expects to double the capacity of plant shortly.

Kirkwood—Ice Factory.—J. B. Marquitz will erect an \$8000 ice factory, with capacity of nine tons per day; water will be procured from 300-foot artesian well; about 30,000 gallons to be used daily.

Milton—Flour Mill.—J. E. Griffith has awarded contract for remodeling his mill to the gyrator system; capacity fifty barrels.

Missouri City—Electric-power Plant.—A company will be formed in Kansas City to build a power plant of 25,000 horse-power for furnishing electricity; plant reported to cost about \$1,000,000. A. Kalman of St. Paul, Minn., vice-president of the Chicago Great Western Railroad, is the originator of the plan, and C. C. Christie, president of the Christie Street Commission Co.; A. B. Stickney, St. Paul, Minn., president of the Chicago Great Western Railroad, and Dr. W. S. Woods, president of the National Bank of Commerce, Kansas City, are said to be interested.

Moberly—Foundry and Machine Shops.—The Jacoby Foundry & Machine Co. has been incorporated, with a capital stock of \$20,000, by F. C. Jacoby, W. W. Jacoby and H. G. Crake.

Neosho—Mining.—N. C. Faulkner has formed a company of Ohio capitalists and leased 1300 acres of land at Neosho, and will develop.

Oronogo—Chartered: The Oronogo Sludge Co., with a capital stock of \$16,000, by G. W. Ball, C. A. Braley, W. S. Gunning, M. F. Downing and J. C. Mays.

Springfield—Produce.—Jean-Hurst-Redfern Produce Co. has been incorporated by J. B. Jean, W. B. Hurst, B. W. Redfern, S. S. Vinton, and C. L. Gunn; capital stock \$300,000.

St. Joseph—Drug Company.—F. H. Coulter, H. L. Coulter and H. B. Coulter have incorporated the City Drug Co., with a capital stock of \$5000.

St. Joseph—Publishing.—The Union Printing Co. has been incorporated, with a capital stock of \$9000, by Walter W. Anderson, F. G. Sprague, Hugh A. Sprague and others.

St. Louis—Manufacturing Plant.—H. G.

Knapp and F. R. Bissell & Co. have sold 238 acres of land to a foreign company for \$71,559. The purchasers will establish a manufacturing plant to employ 500 operatives.

St. Louis—Chartered: The Llewellyn-Beck Exact Heel Compressing Co. has been incorporated, with a capital stock of \$4000, by Henry Llewellyn, Dan C. Beck and John R. Wendel.

St. Louis—Brick Works.—The Continental Brick Co. has been incorporated, with a capital stock of \$75,000, by Frank D. Woodlock, David A. Marks, George H. Hutchinson and others.

St. Louis—Printing and Publishing Company.—Hilpert Printing & Publishing Co. has been incorporated by Otto Hilpert, M. A. Hilpert and H. R. Luyties; capital stock \$10,000.

St. Louis—Coal and Ice Company.—Jesse A. Miller, O. E. Gaeclecker and Robert Thomas have incorporated the Jesse Miller Coal & Ice Co., with a capital stock of \$4000.

St. Louis—Refrigerating Plant.—The St. Louis Refrigerating & Cold Storage Co. has been incorporated for the establishment of a refrigerating plant by James Campbell, William L. Huse, Edward Whitaker, Samuel M. Dodd and others; capital stock \$500,000.

St. Louis—Flour Mill.—The Union Roller Milling Co. has been incorporated, with a capital stock of \$10,000, by Joseph Zionheld, Charles Schacht and John Jacob Pfenninger.

St. Louis—Drug and Surgical Company.—The Allen-Hale Drug & Surgical Supply Co. has been incorporated, with a capital stock of \$20,000, by C. E. Carroll, Thrasher Hall, J. H. Allen, Henry Fass and Thomas B. Harlan.

NORTH CAROLINA.

Catawba—Flour Mill.—O. D. Murray & Co. will put new machinery in their roller flour mill.

Catawba—Cotton Factory.—Sherille Tobacco Co. will, it is reported, erect a cotton factory.

Charlotte—Mattress Factory.—H. H. Prince of Anderson, S. C., will organize a company for the establishment of a mattress factory in Charlotte.

Durham—Electric-light Plant.—Contract has been awarded for new machinery for the Durham Electric Light Co.

Fayetteville—Bedstead and Spring Factory.—A. E. Dixon contemplates the erection of a factory for the manufacture of iron and brass bedsteads and bed springs.*

Fletcher—Brick and Tile Works.—The Asheville Brick & Tile Co., reported last week (under Asheville) as incorporated, has purchased the plant of the Buncombe Brick Co. and made large additions and improvements to it; principal office in Asheville.

Greensboro—Mercantile.—W. H. Belk of Charlotte, J. M. Belk of Monroe, R. Harry of Greensboro have incorporated the Harry & Belk Bros. Co., with a capital stock of \$12,000, to conduct a merchandise business.

Henderson—Cotton Mills.—The Henderson Cotton Mills has decided to enlarge its building one-third its size and install 8000 spindles, giving it in all 15,000 spindles capacity, for consuming annually 5000 bales of cotton and employment for 300 operatives; additional machinery will be installed during August.

Lowell—Cotton Mill.—The Spencer Mountain Mills will erect a 10,000-spindle and 100-loom mill; now has an equipment of 6000 spindles.

Manteo—Lumber and Manufacturing Company.—The Manteo Lumber & Manufacturing Co. has been incorporated, with a capital stock of \$10,000, by W. J. Griffin, R. W. Smith and J. T. Keaton.

Mount Airy—Flour Mill.—Welch & Worth have awarded contract for their 50-barrel flour mill, recently reported.

Mount Holly—Bridge.—A steel bridge will be constructed across the Catawba river and the road from Mount Holly to Gastonia will be macadamized. Address "The Mayor."

Raleigh—Cotton Mills.—The Raleigh Cotton Mills (lately reported) will install 2736 new spindles; present equipment 10,800.

Salisbury—Telephone System.—The Salisbury Telephone Co., lately reported as incorporated, has purchased and will operate an established plant. Address S. H. Wiley.

Summerville—Flour Mill.—J. L. Ogborn & Co. have awarded contract for a 60-barrel flour mill.

Tarboro—Cotton Mill.—The Fountain Cotton Mills will erect building for 10,000 spindles (not 1000, as erroneously stated last week); W. E. Fountain, president.

Wadesboro—Road Improvement.—The city has decided by vote to issue \$20,000 of bonds for road improvements. Address "The Mayor."

Weldon—Silk Mill.—Emry & Driscoll have contract for erection of the silk mill at Roanoke Junction reported last week. It is understood that Sam. F. Patterson, treasurer of the Roanoke Cotton Mills of Roanoke Rapids P. O., is one of the promoters.

Wilmington—Cooperage.—A. H. Slcombe of Fayetteville and J. W. Norwood, who recently purchased the Carolina Cooperage Co.'s plant, has had it remodeled and will operate as the A. H. Slcombe Cooperage and Veneer Works.

Wilmington—Distillery.—The Silver Stream Distilling Co. has been incorporated for the purpose of manufacturing and distilling liquors by W. B. Crumpler, John Capps and J. W. H. Fuchs.

Wilmington—Cotton Mill.—E. C. Holt of Burlington, N. C., (lately reported as to erect a cotton mill) has secured a capital of \$250,000 and site of 100 acres for the proposed plant; company will erect building two stories, 250x125 feet, engine-room 30x50 feet, boiler-room 40x50 feet, warehouses, building for dye plant and others to cost \$70,000. The equipment will embrace 10,000 spindles and 500 looms; employ about 300 operatives.

Winston—Telephone Company.—W. A. Lemly is president; H. G. Chatham, vice-president; B. B. Owens, secretary-treasurer; J. F. Miller, general manager, of the Mutual Telephone Co., reported lately as incorporated to conduct telephone business.

SOUTH CAROLINA.

Abbeville—Cotton Mill.—The Abbeville Cotton Mills will temporarily roof and put additional looms in its two-story addition; later on will complete addition and install 15,000 spindles; present equipment 10,080 spindles and 304 looms.

Alcolu—Saw Mill.—D. W. Alderman & Sons Co. is erecting a new double-story band-saw mill, with a capacity of 40,000 feet per day (as lately reported); machinery all purchased.

Barnwell—Telephone System and Electric-light Plant.—A. Brill of Aiken, S. C., is investigating with a view of establishing a telephone system and electric-light plant at Barnwell.

Barnwell—Cotton Ginnery.—The Southern Round Bale Co. will be incorporated, with a capital stock of \$100,000, by Col. Mike Brown, S. H. Brown and F. J. Devereux. Colonel Brown operates a round-bale ginnery, and it is the purpose of the company to extend the business to other parts of the State.

Belton—Cotton Mill.—E. A. Smyth, president of the Pelzer Manufacturing Co., will be president of the new company forming for the erection of the cotton mill lately reported. The mill will have about 20,000 spindles. F. J. Pelzer of Pelzer, S. C., is also interested.

Charleston—Drug Company.—William M. Bird and Henry F. Welch have incorporated the Richland Drug Co., with a capital stock of \$4000, to conduct a drug business.

Florence—Drying Plant.—The American Tobacco Co. of New York will rent a steam-drying plant at Florence, and will not erect a stemmery, as reported last week.

Greenville—Cotton Mill.—The Huguenot Mills, lately reported as to expend \$30,000 in improvements, will add 1800 spindles and sixty-three looms and new pickers.

Greenville—Cotton Mill.—The Mills Manufacturing Co., reported last week as to put in an increase of 20,000 spindles, will increase its capital stock \$150,000.

Greenville—Textile Mill.—B. A. Morgan and others have under consideration the erection of a mill for the manufacture of jeans.*

Lolo—Cotton Mill.—L. P. Epton, M. P. Burnett, J. P. Stevens and T. R. Trimmer, reported last week as interested in organization of a company for establishment of 5000-spindle mill, have, with J. M. Splawn, incorporated the Valley Falls Manufacturing Co., with an initial capital stock of \$75,000.

Mauldin—Ginnery.—The Mauldin Ginning & Milling Co. has been formed by A. R. Smith, S. A. Wadley, J. W. Griffin, William Verdin and W. S. Baldwin to erect a \$3500 ginnery.

McColl—Ice Factory, Electric Plant and Hotel.—A \$10,000 company is being formed for the establishment of an ice factory, electric-light plant and hotel. Names of interested parties will be announced later.

Mullins—Warehouse.—The Central Tobacco Warehouse has been incorporated, with a capital stock of \$2000, by O. F. Thornton, B. G. Smith, L. M. Rogers, S. W. Smith and others.

Spartanburg—Electric, Gas, etc., Plant.—

F. T. McEwen, representing T. L. Parks and B. F. Jennings of New York, has received franchise for establishing an electric-lighting, gas, heating and railway plant in Spartanburg; 125 arc lights of 2000 candle-power will be furnished.

St. Matthews—Flour and Cornmeal Mill.—Charles F. Zeigler and others, lately reported as to establish a roller flour mill and cornmeal mill, have formed the Zeigler & Cain Milling Co.; flour mill will have a capacity of thirty-five barrels; rice mill and thresher will also be installed; building will be four stories, 28x50 feet.

Union—Knitting Mills.—The Excelsior Knitting Mills will erect another two-story brick building and install machinery, increasing daily output to 1400 dozen pairs; machinery to be driven by 150-horse-power engine; will also install 5000 spindles to make its own yarns, and a dyeing plant. When addition is completed company will employ about 600 operatives; present equipment forty knitting machines.

TENNESSEE.

Bristol—Hardware Company.—Chartered: The Mitchell-Powers Hardware Co. by J. D. Mitchell, H. W. Powers, W. B. Gillispie, J. P. Young and others; capital stock \$100,000.

Centerville—Blast Furnaces and Rolling Mills.—C. T. Chick, William L. Granberg, A. H. Robinson, Chas. G. Trabin, C. L. Childress, all of Nashville, Tenn., have incorporated the Standard Iron Co., with a capital stock of \$24,000.

Chattanooga—Cotton Mill.—The Richmond Spinning Co. is the name of the \$150,000 company reported last week as to be incorporated by E. G. Richmond, Morgan Llewellyn, Davis Giles and others for the erection of a 10,000-spindle mill.

Chattanooga—Sewer-pipe Works.—The Lookout Steam Sewer Pipe Works of D. P. Montague & Co., reported as burned, will be rebuilt; loss on burned plant \$50,000.

Chattanooga—Land Improvement.—The Glenwood Land Co. will be incorporated; the company owns \$100,000 worth of property and will improve it by the erection of dwellings, etc. Hon. Henry C. Ide of Boston, Mass., is said to be at the head of this enterprise.

Clarksville—Snuff Factory.—The Stewart Snuff Co. has been incorporated in Trenton, N. J., with a capital stock of \$300,000, for the operation of the snuff factory about completed at Clarksville. Address Mr. McCrae of Clarksville.

Dyersburg—Cotton Mill.—A cotton mill will be erected; either a yarn mill or a cloth mill. For further information address J. N. Parker, Dyersburg, or J. H. Du Bose, Box 131, Memphis, Tenn.

Jonesboro—Electric-light Plant.—The bill lately reported as introduced in the legislature authorizing the issuance of \$10,000 of bonds for the establishment of an electric-light plant has been passed. Address "The Mayor."

McKenzie—Flour Mill.—Snyder & Etheridge have let contract for the erection of a 40-barrel flour mill.

Memphis—Furniture Factory.—R. G. Morrow, W. P. Holliday, G. W. Harris, R. H. Woolfolk and W. A. Percy have incorporated the Tennessee Furniture Manufacturing Co., with a capital stock of \$27,000.

Knoxville—Agricultural Product.—C. D. Smith Co. has been chartered, with a capital stock of \$30,000.

Monteagle—Glass Factory.—The Tennessee Glass Co., capital \$50,000, proposes the erection of a glass factory at Monteagle.

Nashville—Cooperage.—The Nashville Co-operative Cooperage Co. (reported last week as incorporated) has established a cooperage with 500 barrels daily capacity, employing twenty operatives. Address M. T. Moseley.

Nashville—Paper-box Factory.—Valentine & Co. have been incorporated for the manufacture of chewing-gum paper boxes by J. L. Valentine, W. F. Renner, D. P. Wrenne and others; capital stock \$11,000.

Nashville—Publishing.—John W. Morton, W. G. Saddle, P. A. Smith, John Thompson and others have incorporated the Farmer Publishing Co., with a capital stock of \$25,000.

Newport—Lumber, Mining, etc.—The East Tennessee Lumber, Mining & Railroad Co. of Cocke county has been incorporated, with a capital stock of \$50,000.

Sharon—Flour Mill.—James H. Banks has awarded contract for remodeling his mill to the gyrator system; capacity seventy-five barrels.

TEXAS.

Arlington—Oil Mill.—The Arlington Cotton Oil Co. has been incorporated to erect and

operate an oil mill; capital stock \$30,000; incorporators, Thomas Spruance, A. W. Collins, Frank McKnight and others.

Corsicana—Oil-land Development.—J. S. Cullinan & Co. have purchased the property of the Corsicana Water Co., including 810 acres of land, which will be developed for oil.

Dallas—Windmill Company.—The Texas Challenge Windmill Co. has been incorporated by Thomas Snow of Batavia, Ill.; J. B. Stone and George Pleasants of Dallas; capital stock \$3000.

Deepwater—Artesian Wells, Rice Cultivation, etc.—A syndicate, composed of Bell, Kaufman and Bettibo Bros. of Lake Charles, La., has leased about 400 acres of land near Deepwater from W. E. Jones of Houston and propose to sink fifty eight-inch artesian wells and put the entire tract into rice; about 30,000 gallons of water will be required daily.

Denton—Cotton Gin.—The Jasper Gin Co. has been incorporated to establish a cotton gin; capital stock \$10,000; incorporators, T. F. Jasper, S. D. Flood and R. Duncan.

El Paso—Electric-light Plant.—The International Power & Light Co. will be organized for the establishment of an electric-power plant. A. Krakauer is interested.

Houston—Creamery and Ice Plant.—W. H. Fosner of Chicago, Ill., is investigating with a view of establishing a \$6000 creamery and ice factory in Houston.

Houston—Implement Company.—Howard F. Smith, E. Hauser and J. T. Pradmore have incorporated the South Texas Implement Co., with a capital stock of \$10,000.

Houston—Irrigation Plant, etc.—W. C. Moore (agent of the Southern Pacific Railroad) has organized in St. Louis, Mo., the Trinity Rice, Land & Irrigation Co., with a capital stock of \$260,000; 15,000 acres of land have been purchased in Chambers county and 10,000 more will be leased and will be cultivated in rice; a canal, with capacity for irrigating at least 25,000 acres of land, will be constructed.

Jonah—Flour Mill.—Captain Bruce has purchased engine and boiler for his roller flour mills and gin.

McKinney—Artesian Wells.—The Collin County Mill & Elevator Co. and the McKinney Cottonseed Oil Mill have let contract for boring two artesian wells, one each; contracts call for a depth of 1500 feet.

Port Arthur—Water Works.—The city council has signed contract and granted franchise to Edward Wagner, of Berlin, Germany, and associates for a system of water works at Port Arthur; supply to be obtained from artesian wells and have a capacity of 1,000,000 gallons per day, to be increased from time to time as population demands. George M. Cralg, local manager Port Arthur Land Co., will probably give information.

Smithville—Telephone Company.—The Smithville & Red Rock Telephone Co. has been incorporated, with a capital stock of \$1000, to construct and maintain a telephone line between Smithville and Red Rock, by W. L. Moore, Yerger Hill, W. D. C. Jones, J. W. Burkett and E. Reink.

Texas—Electric-light Plant, Ice Factory and Water Works.—H. T. Stalti contemplates the establishment of an electric-light plant, ice factory and water works; a 50-foot standpipe will be used for storing water. Address care of J. E. Horne & Co. No. 109 South Fifth street, Waco, Texas.*

Waco—Drug Company.—The Morrison Drug Co. has been incorporated, with a capital stock of \$40,000, to conduct a general drug business; incorporators, W. B. Morrison, A. Symes, W. C. Hafmen and others.

Wharton—Gin and Mill.—The Wharton Gin & Milling Co. has been incorporated, with a capital stock of \$20,000, for the erection of a cotton gin by R. B. Huston, G. C. Gifford and H. J. Bolton.

Yoakum—C. U. Yancey is investigating with a view of establishing a canning factory.

VIRGINIA.

Alexandria—Fertilizer Factory.—The Bryant Fertilizer Co. has been incorporated, with a capital stock of \$50,000, by Herbert Bryant, president; William Bryant, secretary-treasurer; and Clarence Whiting of Baltimore, Md., Herbert Bryant and N. P. T. Burke, directors.

Alexandria—Photograph Company.—Walter Pack, T. Arthur Smith, W. P. Herbst, E. J. Dan, T. A. Mullett, all of Washington, D. C., have incorporated the Glasotype Photograph Co., with a capital stock of \$5000.

Austinville—Lead Mines, etc.—The Wythe Lead & Zinc Co., Capt. John C. Roper, president, will install electrical machinery.

Berkley—Docks, Wharves, etc.—The Nor-

folk & Southern Railroad Co. is rebuilding its wharves and docks, and will construct a new transport dock, which improvements, with others being made at Berkley, will cost about \$150,000; M. K. King, general manager, Norfolk.

Berryville—Water Works.—The city will probably hold an election to decide the issuance of bonds for completion of the partly constructed water system. Address Mayor D. H. Jones.

Covington—Pulp and Paper Mill.—The West Virginia Pulp & Paper Co. of Piedmont, lately mentioned as to establish a plant at Caldwell, W. Va., has decided to locate at Covington. The buildings will be constructed entirely of steel, brick and stone, and will cost, including machinery, at least \$1,000,000.

East Radford—Woolen Mill.—The Newby Woolen Manufacturing Co. has been organized, with S. J. Fisher, president, and E. F. Gill, secretary-treasurer; building has been purchased and machinery is being installed; capital stock \$10,000.

East Radford—Woolen Mill.—The Radford Woolen Mill Co. has been organized, with Joseph H. Chumbley, president; John P. Osborne, secretary-treasurer, and L. L. Fansler, manager. A three-story building will be installed with machinery for woolen mill; capital stock \$10,000.

Goshen—Iron Furnace.—The Victoria Furnace Co. has leased its Goshen furnace to a Western Iron company which will put the furnace in blast.

Hiltons—Brick Works.—John Hedgecock of Pulaski will establish extensive brick works at Hiltons.

Lynchburg—Marble Works.—The Summers Marble Co., reported during the week as incorporated, will establish works with a capacity of 1000 square feet of finished marble per day. Address Jas. E. Summers.*

Manchester—Chartered: The Purified Down & Feather Co., with a capital stock of \$5000, by Chas. S. Stacy, R. M. Beattie, H. C. Beattie, H. H. Clarke and S. G. Webb, all of Richmond.

Manchester—Construction Company.—The W. B. Bradley Construction Co. has been incorporated, with a capital stock of \$5000, by W. B. Bradley, A. J. Bradley, M. E. Bradley and others.

Newport News—Cellulose Factory.—The Marsden Cellulose Co., A. G. Winter of New York, general manager, will erect a large plant at Newport News; company has plants at Owensboro, Ky., and Rockford, Ill. It is said ten acres have been bought for site for \$1,000,000 factory, and that company's headquarters will be moved to Newport News.

Norfolk—Copper-smelting Plant.—It is reported that site has been furnished at West Norfolk by the Atlantic & Danville Railway Co. for the erection of a large copper-smelting plant; a Mr. Eustis is said to be interested.

Norfolk—Ferries Company.—The Elizabeth River & Hampton Roads Ferry Co. has been incorporated, with G. M. Serpell, president; F. B. Dancy, vice-president; J. A. Campbell Groner, secretary-treasurer; capital stock \$20,000.

Ocras—Fish-guano Factory, etc.—Bellows & Squires are improving their fish-guano, oil, etc., factory at a cost of from \$6000 to \$8000, and in future will make all dry goods.

Pearisburg—Mineral Lands.—The Younken-Marriman Co. has been incorporated, with a capital stock of \$100,000, to develop mineral and timber interests on Wolfe creek.

Pearisburg—Lumber Mills.—The Porterfield Lumber Co. has been organized, with W. E. C. Marriman, president; F. F. Farrier, secretary; W. E. C. Marriman, treasurer, and E. B. Younken, general manager; capital stock \$25,000; company purchased for development timber on 13,000 acres of land.

Petersburg—Bridges.—The Richmond, Petersburg & Carolina Railroad Co. will construct iron bridges across the Appomattox river, in Petersburg; across Swift creek, near Petersburg; across James river, between Manchester and Richmond; across Nottoway river, Meherrin river and Roanoke river. Address Gen. J. S. Negley, vice-president and general manager.

Portsmouth—Spring-bed and Mattress Factory.—Irving Bros. will erect a spring-bed and mattress factory, 90x32 feet, as lately reported.

Portsmouth—Electric-light Plant.—The Portsmouth Coal & Ice Co. has closed contract for a complete electric-lighting plant.

Pulaski—Furnace.—The Dora Furnace Co. has awarded contract for an enlargement to its boiler-house that will support four batteries of tubular boilers developing 1000 horse-power; another large stove will be

erected and new engine will be installed in the power-house of the Dora furnace which will make it a 200-ton plant.

Richmond—Knitting Mill.—J. L. Hill and others will, it is reported, establish a knitting mill.

Richmond—Tobacco Factory.—Thomas B. Scott and others have purchased the factory of the United States Tobacco Co., and will make extensive improvements.

Smithfield—Stemmy.—Chamberlain & Willingham of Goldsboro, N. C., will establish a stemmy at Smithfield to employ about 100 operatives.

Smithfield—Stemmy.—Venable & Pettus will erect a stemmy to employ about 200 operatives.

Stonega—Coke Ovens.—The Virginia Coal & Iron Co. will construct fifty new coke ovens; has at present over 400 ovens in full operation.

Virginia Beach—Ice Factory.—The Virginia Beach Ice Manufacturing Co., reported during the week as incorporated, has purchased all machinery necessary for 30-ton ice plant. Address James S. Groves, Norfolk, Va.*

WEST VIRGINIA.

Buckhannon—Publishing.—H. F. Davis, T. J. Liggett, W. B. Cutright, Eugene Brown and others have incorporated the Knight-Errant Co. for the purpose of publishing a newspaper; authorized capital \$10,000.

Charleston—Drug and Chemical Company.—The Charleston Drug & Chemical Co. has been incorporated, with an authorized capital of \$200,000.*

Charleston—Chemical Company.—The Palmetto Chemical Co. has been incorporated, with a capital stock of \$1000, by Victor H. Conkle and others of Philadelphia, Pa.

Charleston—Chartered: The International Tourist Co., for advertising, managing and directing railways and steamship companies, by A. C. Jenkins of Washington, D. C.; C. G. Cutter and W. N. Bennington of New York city, and J. H. Von Drele of Wheeling, W. Va.; authorized capital \$50,000.

Dana (P. O. at Charleston)—Laundry.—The Dana Steam Laundry Co. has been incorporated by J. W. Gandsell, J. M. Smith, John F. Getty and others, with an authorized capital of \$10,000.

Davis—Laundry.—J. W. Goodsell, J. M. Smith, R. D. Helronomous, John F. Getty and H. S. Black have incorporated the Davis Steam Laundry Co. for the establishment of a steam laundry and dyeing plant; authorized capital \$10,000.

Fayetteville—Coke Ovens.—The Sun Coal & Coke Co. has let contract for erection of 100 new coke ovens.

Hartford—Salt Mines, etc.—V. P. Collins, H. W. Collins and C. R. Collins of Covington, Ky.; H. P. Collins, P. L. Clifton of Hartford, have incorporated the Royal Salt Co. for the development of salt mines, etc.; authorized capital \$25,000.

Huntington—Gold Mining.—J. L. Caldwell, Bernard Pratte, B. J. Wilson, C. W. Campbell and N. Smith have incorporated the Pratte Gold Mining Co. to conduct a general mining and mining business; authorized capital \$5,000,000.

Keyser—Door and Box Factory.—The Keyser Door & Box Co. has been incorporated, with an authorized capital of \$500,000, by Samuel E. Slaymaker of Philadelphia, Pa.; Sidney Van Awker of Oswego, N. Y., and others.

Littleton—Telephone System.—B. J. Farrell and others have incorporated the Exchange Telephone Co., with an authorized capital of \$25,000.

Lowell—Telephone System.—The Lowell & Greenbrier Valley Telephone Co. has been incorporated, with an authorized capital of \$10,000, for the construction of a telephone system, 40-mile line.*

Moundsville—Oil Wells.—L. C. Straut, J. M. Foote, C. A. Weaver, D. J. Stabs and H. W. Hunter, all of Pittsburg, Pa., have incorporated the Garnet Oil Co. for the development of oil lands; authorized capital \$300,000.

Orleans Road—Lumber Mill.—The Billmeyer Lumber Co. is rebuilding its plant, reported as burned.

Parkersburg—Plumbing.—C. H. Turner, L. M. Gaimor, W. W. Van Winkle and Owen Bryan have incorporated the C. H. Turner Co., with an authorized capital of \$30,000.

Parkersburg—Oil and Gas Company.—Lee Phillips, John M. Sands, James C. Grant, H. B. Walker and others have incorporated the Expansion Oil & Gas Co., with an authorized capital of \$50,000.

Sewell—Storehouse.—The Longdale Iron Co. will erect a storehouse.

Sewell—Bridge.—The Sewell-Connard

bridge will be rebuilt. Address "County Clerk."

Summersville—Timber Lands.—Chartered: The Hominy & Deer Creek Boom Co. has been incorporated by George W. Curtin, Jas. W. Morrison, Albert Lynch, John D. Alderson and A. J. Hoover to develop timber lands.

Wheeling—Oil and Gas Wells.—Charles A. Post, Edw. T. Holmes, George E. Turrill, J. O. Riddle and E. Opperman, all of Cleveland, Ohio, have incorporated the Reserve Oil Co. to conduct a general oil and gas business; authorized capital \$250,000.

BURNED.

Chattanooga, Tenn.—The Lookout Steam Sewer Pipe Works of Montague & Co.; estimated loss \$50,000.

Knoxville, Tenn.—The saw mill of the Knoxville Furniture Co.; estimated loss \$4000.

Petersburg, Va.—The planing mill of Eanes & Hargrove; estimated loss \$10,000.

Petersburg, Va.—Crate and fruit-basket factory of Southside Manufacturing Co.; estimated loss \$28,000.

BUILDING NOTES.

Augusta, Ga.—Warehouse.—S. Lesser will enlarge warehouse by erection of two compartments with capacity each of 1000 bales of cotton.

Baltimore, Md.—Bank Building.—The Guardian Trust & Deposit Co. will erect an eight-story bank building equipped with all the latest appliances to cost about \$250,000.

Baltimore, Md.—Hotel.—Mullin & Bro. have had plans prepared by Paul Emmert and awarded contract to William J. Ferguson for the erection of a seven-story hotel to contain seventy rooms at Liberty and Baltimore streets.

Baltimore, Md.—Piers, etc.—The Old Bay Line, John R. Sherwood, general manager and vice-president, has awarded contract for the erection of the building to contain boiler-room and machinery for heating and lighting the offices and waiting-rooms at the new piers now erecting. The piers will have a wharfage of 23,000 square feet.

Baltimore, Md.—Store Building.—Baldwin & Pennington have completed plans for the six-story store building to be erected by O'Neill & Co. at Charles and Lexington streets.

Baltimore, Md.—Dwellings.—Clarence Hampson will erect eleven brick dwellings.

Baltimore, Md.—Bank Building.—The National Union Bank, 5 East Fayette street, will erect a new bank building.

Baltimore, Md.—Church.—Faith Reformed Church will erect a one-story stone and brick edifice 64x80 feet, to cost \$25,000. Address "The Pastor."

Baltimore, Md.—Office Building and Bridge.—The Old Bay Line Company, R. Curzon Hoffman, president, has let contract to E. M. Noel at \$20,000 for the construction of its iron bridge and office building; building will be four stories, of brick and stone, 35x80 feet.

Birmingham, Ala.—Hospital.—T. U. Walter & Ullman have prepared plans for the proposed Hillman Hospital, which will be a three-story structure of brick and stone, to cost \$30,000; architects will ask for bids soon.

Birmingham, Ala.—Office Building.—James L. Tanner has, it is reported, purchased the Hewlett block for \$120,000 for Eastern capitalists, who intend erecting a 10-story office building.

Charleston, W. Va.—The board of directors of the Home for Incurables has adopted the plans of Harrison Albright for the erection of its proposed \$25,000 building, and will advertise for bids for the brick, stone and tiling work.

Chattanooga, Tenn.—School.—John Roy Baylor and others have incorporated the Baylor University School for the erection of a \$10,000 brick school building. Address Prof. J. R. Baylor.

Chattanooga, Tenn.—Building.—Mrs. L. W. Sanders will erect a three-story building, plans for which are being prepared.

Columbia, S. C.—Hotel.—New England capitalists are investigating with a view of erecting in Columbia a hotel, three stories, to cost \$100,000. C. B. Simmons, 1203 Washington street, may be addressed for information.

Corsicana, Texas.—Church.—The Reformed Presbyterian congregation has had plans made for a church building to cost \$10,000 and for a parsonage to cost \$2500. Address Rev. W. W. Orr.

Corsicana, Texas.—Store Building.—R. M. Collins will erect a large wholesale grocery store.

East Lake, Tenn.—Residence.—G. F. Smith will erect a \$5000 residence.

Forest, Miss.—Courthouse.—Contract for erection of the county courthouse will be let on May 27; Andrew J. Bryan & Co., Atlanta, Ga., architects.

Fort Worth, Texas.—Depot.—Contract for the erection of the union depot to be erected by the Santa Fe and Houston & Texas Central railways has been let to Smith & Barden; main building will be of pressed brick, trimmed with Mineral Wells stone, 113x85 feet.

Gaffney City, S. C.—Jail.—Contract has been let at \$9499.50 for the erection of proposed jail building. Address "County Clerk."

Gibson, Ga.—Jail.—Contract will be let on June 6 for repairing and rebuilding jail. Address B. F. Walker, county clerk.

Greenville, S. C.—Office Building.—J. P. Miller will erect a two-story 25x50-foot office building.

Johnson City, Tenn.—City Hall.—The city will issue \$10,000 of bonds for the erection of a City Hall. Address "The Mayor."

Kansas City, Mo.—Apartment-house.—Geo. Mathews has prepared plans for a six-story apartment-house to be erected by I. J. Hedrick and associates, who have recently purchased site for \$25,000.

Kansas City, Mo.—Office Building.—Hucke & Sexton have prepared plans for three-story stone and iron store and office building 50x50 feet.

Knoxville, Tenn.—Warehouse, etc.—The Brookside Mills will expend about \$10,000 in building a cotton warehouse and platforms for handling cotton, and other improvements.

Lockhart, Texas.—Library Building.—Jas. G. Burleson, Wm. Steele and A. B. Storey will receive bids until May 15 for the erection of public library to cost about \$10,000; plans and specifications can be found at First National Bank. Bids must be accompanied by certified check for \$500; bond required; usual rights reserved.

Memphis, Tenn.—Police Station.—The city will erect a \$50,000 police station, as reported last week; all material has been contracted for; J. J. Williams, mayor.

Nacogdoches, Texas.—Store Buildings and Church.—Contracts have been let to H. L. Austin and William Rulf for five brick stores, four one-story buildings and one two-story; D. Rulf prepared the plans. Contract for the new Baptist church has been awarded to D. Rulf at \$6000.

Nashville, Tenn.—Business Buildings.—Gray-Dudley Hardware Co. will erect a \$60,000 business building. Nine five-story store buildings, to be of brick and stone, to have electric lights, steam heat and supplied with water and power and contain electric elevators, will be erected at a cost of about \$100,000; address C. C. Christopher. Samuel Murphy will erect a storehouse at a cost of \$15,000.

New Orleans, La.—Bank and Office Building.—Isadore Newman, Sr., will erect a modern three-story building for banking and railroad purposes, as reported during the week.

Newport News, Va.—Business Building.—The Washington Avenue Investment Co. will be incorporated for the erection of a large business building.

Newport News, Va.—Church.—Contract has been awarded to Peddicord & Co. at \$23,437 for the erection of the First Presbyterian Church.

Newport News—Temple.—The Kecoughton Pythian Lodge has awarded contract to R. B. Tenniss for its proposed \$20,000 temple.

Parkersburg, W. Va.—Courthouse.—County commissioners have adopted plans of L. W. Thomas at Canton, Ohio, for the erection of a \$100,000 courthouse, and bids are wanted for the erection. Address "Clerk to Wood County Commissioners."

Pinehurst, N. C.—Hotel.—James W. Tufts, Box 533, Boston, Mass., will erect a hotel at Pinehurst to accommodate about 400 guests, as lately mentioned.

Salisbury, N. C.—Courthouse, etc.—Bids will be received until May 29 for building an addition to present courthouse, remodeling and supplying fireproof metal furniture, fireproof record rooms, etc., after plans, etc., now on file in office of register of deeds, Salisbury, or in Room 56, Metzgerott Building, Washington, D. C. Address J. Frank McCubbins, chairman commissioners. (See advertisement in Manufacturers' Record.)

San Antonio, Texas.—Hall and Market-house.—Alfred Giles has prepared plans for the proposed market-house and convention

hall building 298x129 feet to cost \$45,000, to have a seating capacity of 6300. Bids for the erection will be received until June 5. Address "The Mayor."

Searcy, Ark.—College.—The Galloway Methodist College has awarded contract to W. R. Stewart & Bro. of Newport at \$26,840 for the erection of its proposed building.

Sherman, Texas.—School Building.—S. Baker has received contract at \$15,497 for the erection of the proposed high-school building.

Union, S. C.—Cottages.—The Excelsior Knitting Mills will erect fifteen additional cottages.

Washington, D. C.—Buildings.—Michael I. Weller will erect a row of twenty-nine two-story houses, 14x33 feet, with fronts of press brick; H. G. Wagner will erect eight dwellings, two stories, with press-brick fronts; Collins & Gaddis will erect three two-story houses, 18x38 feet, with buff-brick fronts; Spelden & Spelden have designed an apartment-house for D. G. Johnson estate, four stories, 21x108 feet, of press brick.

Washington, D. C.—Buildings.—J. O. Johnson will build four-story apartment-house after plans by N. T. Haller; Charles E. Foster will build apartment-house, five stories, 53x81 feet, of brick and terra-cotta on concrete, cement and stone foundations, estimated cost \$32,000; D. G. Johnson estate will erect apartment-house, four stories, 21x108 feet, of press brick, to have steam heat and cost \$12,000; T. F. Schneider has prepared plans for apartment-house for Frank H. Duehay; addition will be made to the District workhouse to cost \$15,000; a \$50,000 addition will be made to the District jail, plans for which are being prepared in the office of the inspector of buildings; permit has been granted to Annie L. Terrell for a brick apartment-house, 21x108 feet, flat tin roof, steam heat, etc., cost \$12,000; Collins & Gaddis will erect three brick and stone dwellings, 18x38 feet, buff brick and Euclid stone fronts, mansard roof, furnace heat, cost \$8000.

Wilmington, N. C.—Cottages.—Company forming to erect cotton mill will also erect 125 cottages for operatives. Address E. C. Holt, Burlington, N. C.

RAILROAD CONSTRUCTION.

Railways.

Brooksville, Ky.—Younger, Alexander and others of Brooksville are interested in a plan to build a railroad from Brooksville to Johnson Junction, which will be connected with the Brooksville & Wellsburg Railroad. It is also proposed to extend the latter line to a connection with the Chesapeake & Ohio, forming a new route to Cincinnati from Brooksville and the towns along the line.

Columbus, N. C.—It is stated that the Polk County Railway Co. has been organized, with T. N. Spence of Cleveland, Ohio, president; William M. Justice, vice-president, and C. W. Pearson, engineer. This company proposes building a railroad from Rutherfordton, N. C., to the Tennessee State line by the way of Asheville; the estimated distance is 100 miles.

Frankfort, Ky.—President H. P. Mason of the Frankfort & Cincinnati Railroad Co. advises the Manufacturers' Record that no extension of its line will be made in the near future.

Frederick, Md.—Another survey will be made in the interest of the Baltimore & Ohio for the purpose of obtaining another route on the Frederick division which will avoid the heavy grades near Mt. Airy. Several surveys were made last year for the same purpose. P. H. Irwin is chief engineer of the company at Baltimore.

Harrisonburg, Va.—A company, it is reported, has been formed to build a line into West Virginia, which will connect with the Chesapeake & Western Railroad. The new company is called the Rockingham & West Virginia Mining & Railway Co.

Hope, Ark.—A. P. Dyke, one of the promoters of the Central Arkansas Railroad, writes the Manufacturers' Record that this line will be twenty-three miles in length, and contracts have been let for its construction. W. V. Foster and J. T. West are among the promoters.

Hubert, Ga.—Ten miles of the Savannah & Statesboro Railroad, under construction between Woodburn and Statesboro, Ga., have been completed and sixteen miles graded. W. F. Wright, at Hubert, is general superintendent.

Kansas City, Mo.—A company is being formed, it is understood, of local capitalists to build an electric line from Kansas City to Missouri City by the way of Liberty; it

will pass through extensive coal fields in Clay county if constructed.

Little Rock, Ark.—It is stated that an extensive mileage of track has already been laid on the Choctaw & Memphis Railroad in Arkansas, and that contracts have been let to construct the necessary freight and passenger depots along the line. Henry Wood at South McAlester, I. T., is general manager of the company.

Loganville, Ga.—Surveys are being made for an extension of the Loganville branch of the Seaboard Air Line, which will be about three miles long. E. St. John, at Portsmouth, Va., is general manager.

Macon, Ga.—There is a report current that the Georgia Southern & Florida will be extended from Fairfield to a point on the Gulf coast near Tampa, Fla. It is understood that a connection will be made with the Gainesville & Gulf Railroad, which is now being constructed to Sampson City. William Checkley Shaw at Macon is vice-president.

Montgomery, Ala.—It is stated that about eleven miles of grading have been completed on the route of the Montgomery, Haynesville & Camden Railroad between Camden and Allentown, Ala. Sol. D. Bloch at Montgomery is president of the company.

Moultrie, Ga.—The Pinopolis Saw Mill Co., which controls the Sparks, Moultrie & Gulf Railroad, has begun work upon an extension of this line from Sinclair to Tifton. The line will pass through Moultrie.

Nashville, Ga.—C. E. Martindale of Sparks, Ga., has made a proposition to the business men of Nashville to build a railroad from Sparks to that town if the business men will secure the right of way and subscribe to \$5000 worth of the stock of the company. The road would be about thirteen miles in length.

Natchez, La.—The New Orleans & Northwestern Railroad Co., it is reported, has determined to extend its line from Bastrop, the present northern terminus, to the State line between Louisiana and Arkansas, where it will connect with the proposed road to be built by the Little Rock & Gulf Railroad Co. This combination will form a new line between Natchez and Little Rock. L. K. Hyde at Titusville, Pa., is manager.

Newport, Tenn.—The East Tennessee Lumber & Mining Co., it is stated, has determined to construct a railroad in Sevier county from Newport to a point near Fowler's Station. R. C. Smith and J. J. Brooks are among the directors of the company.

New Orleans, La.—It is announced that the Illinois Central Railway Co. has accepted the franchise offered by the city authorities for terminals along the river front and has signed an agreement to this effect. The franchise provides for the construction of a double-track line. David Sloan at Chicago is chief engineer.

Racine, W. Va.—It is understood that Boone county has voted in favor of issuing bonds for the proposed West Virginia & Southern Railroad being promoted by the Kanawha Construction Co. Russell J. Quarrier of Charleston is the promoter of it.

Radford, Va.—It is reported that the Norfolk & Western Railroad Co. has determined to construct a branch from Radford to Floyd Courthouse. The distance is estimated at twenty-five miles. The route is along the New river. L. E. Churchill at Roanoke, Va., is engineer of the company.

Saluda, S. C.—The business men of Saluda are interested in securing the extension of the Carolina Midland Railroad or of the Whitmire, Newberry & Augusta Railroad to this town. There is a possibility that a bond issue may be voted to encourage one of these companies to include Saluda on its route.

Sour Lake, Texas.—The Sour Lake Springs Company has revived the project of building a railroad line to connect this resort with some system now in operation. J. E. Newton is chairman of the railroad committee.

Tifton, Ga.—F. J. Ansley, secretary of the Union Lumber Co., which is constructing the Tifton, Thomasville & Gulf Railroad, writes the Manufacturers' Record that it will be fifty-six miles long and the company expects to complete it by January 1; 60-pound steel rails will be used. H. M. Atkinson of Atlanta is president of the company.

Street Railways.

Gainesville, Ga.—D. E. Evans, general manager of the Gainesville Street Railroad Co., writes the Manufacturers' Record that it is proposed to rebuild the present street railroad line and operate it with trolley cars. About five miles will be constructed at first to be laid with 70-pound rails. He expects to float \$100,000 in bonds to finance the project.

Jackson, Miss.—About three miles of the street railroad have been completed and most of the machinery received for the power-house. It is calculated to complete the line within the next few months.

Kansas City, Mo.—The City Terminal Railway Co. has been incorporated by Frank Hagerman and others, with \$50,000 capital, to build a line in the suburbs.

Newport News, Va.—Contract has been let for constructing a part of the electric road to be built by the Peninsula Railroad Co. to Messrs. Porter & Co. of Norfolk, Va., and work has begun. A quantity of rails for the line have already been received.

Spartanburg, S. C.—The mayor has signed a contract granting the franchise to F. T. McEwen and others to construct a street railway, also a plant for electric-light and power purposes. It is understood that Mr. McEwen represents T. L. Park and F. B. Jennings of New York. Five miles of the railroad is to be completed by July 1, 1900.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Equipment.—W. M. Ragan, Americus, Ga., wants to correspond with manufacturers of or dealers in truck and vegetable tools.

Ammonia and Salt.—The Virginia Beach Ice Manufacturing Co. wants to buy ammonia and salt. Address James S. Groves, Norfolk, Va.

Bed-springs Machinery.—See "Ironworking Machinery."

Boiler Equipment.—Vance Cotton Mills Co., Chattanooga, Tenn., wants to buy a water heater and filter and small stack for a 100-horse-power boiler.

Bottling Apparatus.—T. D. Young, Burkeville, Va., wants the addresses of manufacturers of machinery for bottling, carbonizing and manufacturing soda water, ginger ale, etc.

Brassworking Machinery.—See "Ironworking Machinery."

Brick Machinery.—F. M. Jones, Barachias, Ala., wants prices on brick machinery.

Building Material.—G. B. Glass, Georgetown, Ky., wants to purchase building material for \$12,000 brick and stone City Hall building, with slate roof.

Cotton Mill.—J. W. Eckford, Aberdeen, Miss., wants to correspond with manufacturers of cotton-mill machinery relative to the establishment of a mill.

Cotton Mill.—J. A. Fouché, McDonough, Ga., wants to correspond with manufacturers of machinery relative to the establishment of a \$50,000 or \$100,000 cotton factory.

Cotton-oil Mill.—T. V. White, Epes, Ala., wants estimates on a three-press cottonseed-oil mill.

Crushing Machinery.—Ernest Legarde & Sons, New Orleans, La., want to purchase one second-hand crusher (Gates preferred), capacity 300 to 500 tons.

Ditching Machinery.—See "Shovel."

Electrical Machinery.—See "Mining Machinery."

Electrical Machinery.—Vance Cotton Mills Co., Chattanooga, Tenn., wants to buy an electric machine for small mill.

Electrical Machinery.—G. M. Bollinger, Leas Springs, Tenn., wants to purchase dynamo and equipment to light saw mill.

Electrical Machinery.—D. E. Evans, No. 9 E. Spring street, Gainesville, Ga., is ready for estimates on electrical generators, turbine water wheels and other equipment necessary to a water-power electrical plant.

Electric-light Plant.—Midway, Ky., will open contracts May 9 for erection of electric-light plant. Address Matt Winn, mayor.

Electric-light Plant.—Lawrence Everhart, Decatur, Ga., wants to correspond with manufacturers of electric-light machinery, including poles, wire and other necessary material.

Elevator.—High Point Furniture Co.,

High Point, N. C., is in the market for truck elevator.

Engine.—See "Mining Machinery."

Engine.—W. F. Robinson, Orangeburg, S. C., wants a six-horse-power gasoline or oil engine.

Fire-alarm System.—W. S. Douglas, comptroller, New Orleans, La., will receive sealed proposals until May 29 for furnishing a fire-alarm system in accordance with specifications in office of city electrician; deposit of \$300; bond with surety company, \$20,000. Bidders must have paid city license in order that bids may be accepted. Usual rights reserved.

Foundry Equipment.—Ralph Emerson, Rockford, Ill., wants to purchase machinery for foundry and wood shop.

Gasoline Engine.—See "Engine."

Glass Molds.—The Summers Marble Co., James E. Summers, Lynchburg, Va., wants many different kinds of glass molds for marble works.

Hardware.—Merck & Son, 85 Gracechurch street, London, England, wants to represent in their country some reliable manufacturer of hardware.

Ice-factory Supplies.—See "Ammonia and Salt."

Ironworking Machinery.—A. E. Dixon, Fayetteville, N. C., wants to correspond with manufacturers of machinery for making iron and brass bedsteads and bed springs.

Lumbering Equipment.—See "Railway Equipment and Construction."

Machine Tools.—Greer Machinery Co., Knoxville, Tenn., wants second-hand 12 to 14-inch by seven or eight-inch-bed lathes, also one 30 by four or five-inch-bed lathe.

Machine Tools.—Wisconsin Machinery Co., Milwaukee, Wis., is in want of several presses, one to be a machine of about 7000 or 8000 pounds of long stroke; also a double-acting press similar to the No. 68 of Bliss make; second-hand preferred.

Marble Works.—See "Glass Molds."

Mining Machinery.—Providence Coal Co., W. J. Nisbet, general manager, Providence, Ky., is in the market for a sheet-iron tank or heater, one feed pump for boiler, 21½-inch suction, two-inch disc; four electric mining machines, seventy-five tons 35-pound relay rail f. o. b. cars Providence; one engine, 140 or 150 horse-power, automatic high-speed; one motor, seventy-five horse-power; one 100-kilowatt generator, 250 volts, multipolar type; 400 pounds copper wire (bare), either 00, 000, 0000 water column, steam gauge, steam pipe from one-half to three inches, second-hand, about 5000 feet.

Oil Engine.—See "Engine."

Oil-mill Machinery.—Tar River Oil Co., Tarboro, N. C., is in the market for a steam-power hydraulic pressure pump suitable for operating three cottonseed-oil presses.

Pump.—See "Oil-mill Machinery."

Railway Equipment.—See "Mining Machinery."

Railway Equipment.—Jacksonville & Southwestern Railroad Co. will buy two locomotives, also passenger, box and lumber cars, within sixty days; George L. Davis, manager, Jacksonville, Fla.

Railway Equipment and Construction.—H. M. White, general manager White Hall Company, Dillwyn, Va., wants circulars and prices on new or second-hand machinery for tramroads, to be operated by horse-power or by steam; also probable cost of constructing such roads.

Railway Equipment.—Samuel T. Stowe, Dixie, N. C., wants to correspond with manufacturers of yellow-pine cross-ties and railroad materials.

Railway Equipment.—Abercrombie & Williams, Barrow, S. C., want to rent for sixty days twelve flat cars in railroad construction.

Railway Equipment.—Fred D. Ball, Montgomery, Ala., wants to buy five to ten flat cars.

Rice Mill.—Miller-Morris Canal, Irrigation & Land Co., J. H. Lewis, secretary and general manager, Estherwood, La., wants estimates on rice mill of 600 barrels every twenty-four hours.

Road Machinery.—County commissioners, Columbus, Ga., are considering buying a portable rock crusher. Address J. P. Fuller, agent of the commissioners.

Road Machinery.—D. H. Traxler, Timmonsville, S. C., wants to correspond with manufacturers of reversible road-scraper machines for building up and making public road.

Road Machinery.—I. M. Hyatt, superintendent of public roads for Haywood county, Waynesville, N. C., wants one engine,

twenty horse-power, with boiler twenty-five horse-power, one-eighth-ton rock crusher and elevator on skids, two dump wagons, two wheel scrapers, one road machine.

Saw-mill Machinery.—G. M. Bollinger, Leas Springs, Tenn., wants catalogues and prices on saw machine, edger and other machinery.

Saw-mill Machinery.—High Point Furniture Co., High Point, N. C., is in the market for 36-inch band saw.

Scales.—Central Phosphate Co., Mt. Pleasant, Tenn., wants a track scale for six-ton cars, gauge twenty-six and one-half inches.

Shovel.—George R. Brown, secretary Board of Trade, Little Rock, Ark., wants to correspond with some one who has for sale a second-hand steam shovel for doing railroad work, ditching, etc.

Soda-water Apparatus.—See "Bottling Apparatus."

Starch Machinery.—C. H. Cash, Crescent City, Fla., wants to correspond with manufacturers of starch machinery, graters, centrifugals and starch-drying appliances.

Stationery.—Merck & Son, 85 Gracechurch street, London, England, want to represent in their country some reliable manufacturers of stationery.

Stave Machinery.—Greer Machinery Co., Knoxville, Tenn., is in the market for new and second-hand stave-bucking machine.

Telephone Equipment.—Lowell & Greenbrier Valley Telephone Co. wants to purchase wire, insulators, brackets and telephones for telephone line of forty miles. Address A. C. Lowe, Lowell, W. Va.

Textile Machinery.—The New Orleans Cotton Mills Co., Limited, Ernest V. Reiss, sec-

retary, No. 44 Carondelet street, New Orleans, La., is in need of linen machinery.

Textile Machinery.—B. A. Morgan, Greenville, S. C., wants to correspond with manufacturers of machinery for making jeans.

Wagon and Buggy Machinery.—Marion Buggy & Wagon Co., corner State and Mill streets, Marion, Ohio, wants to purchase machinery for manufacturing delivery wagons and buggies.

Water Wheels.—See "Electrical Machinery."

Water Works.—Jacob Phinixy, Augusta, Ga., wants a windmill, pump, tower and tank.

Water Works.—H. T. Staitl, care of J. E. Horne & Co., No. 109 South Fifth street, Waco, Texas, is in the market for about 30,000 feet of six-inch second-hand water main (pipe); also wants pumping outfit.

Weather-strip Factory.—Richard J. Kane, Self-Adjusting Weather Strip Co., Lynn, Mass., will purchase machinery for weather-strip factory.

Well Drilling.—The clerk of supervisors of Sunflower county, Indianola, Miss., will receive bids until June 5 for sinking an artesian well in the courthouse yard.

Windmill.—See "Water Works."

Woodworking Machinery.—See "Foundry Equipment" and "Wagon and Buggy Machinery."

Woodworking Machinery.—Frank S. Harris, Macon, Ga., wants to communicate with parties who manufacture machinery for making wooden dishes or bowls, such as is used for putting up lard, pickles, etc.

Woolen Mill.—See "Textile Machinery."

GENERAL INDUSTRIAL NEWS.

The damage by fire to the Buffalo Woolen Mills at Worthington, Pa., is estimated at \$50,000.

W. A. Blakely and others have formed the Pittsburgh Brake & Shoe Co., with \$100,000 capital stock.

S. C. Miller of Akron, Ohio, may be addressed relative to the Akron Oil Co., recently formed.

H. S. Blossom and others have formed the Standard Welding Co. at Cleveland, Ohio, with \$500,000 capital.

The Lapell Bottle Co. will manufacture patent bottles at Lapell, Ind. E. H. Hutton may be addressed.

The Sims Glass Co. has been formed by John Masquelet and others to manufacture glassware at Sims, Ind.

The Daleville Glass Co. will manufacture glassware at the town named in Indiana. William H. Cox may be addressed.

The National Tube Works Co., it is stated, has determined to remodel and enlarge both of its furnaces at McKeesport, Pa.

The Higgins Ice Co. has been formed to manufacture artificial ice at Fort Wayne, Ind., by E. R. Higgins and others.

The Variety Machine Co., it is reported, is about to increase the capacity of its works, which are located at Warsaw, N. Y.

George W. Graves, architect, has prepared plans for a building to cost \$60,000 for the Cataract Optical Co. of Buffalo, N. Y.

The W. Dewees Wood Co. of McKeesport, Pa., may erect two sheet mills to cost \$75,000 in addition to its present plant.

The Marion Wagon & Buggy Co. of Marion, Ohio, will need equipment for manufacturing delivery wagons and buggies.

George W. Meredith is a director in a brewing company recently formed at East Liverpool, Ohio, capitalized at \$200,000.

The proposed mill to be erected by the Queen City Cotton Mill Co. at Burlington, Vt., it is stated, will cost about \$300,000.

The Schwab Safe & Lock Co., at Lafayette, Ind., will manufacture safes, also jail work. Joseph Schwab is one of the directors.

H. W. Cross is one of the directors in the Lackawanna Home Supply Co., which will manufacture baking powder, etc., at Scranton, Pa.

The Roble Concrete Co. will manufacture this material at Manchester, N. H., with \$15,000 capital. Luther M. Pike may be addressed.

J. M. Ogler of Coshocton, Ohio, is a director in the Coshocton Iron & Steel Co., capitalized at \$100,000 for manufacturing various metals.

Abraham Durr of Buffalo, N. Y., may be addressed relative to the Cascade Smelting Co., recently incorporated with \$1,000,000 capital stock.

It is understood that the East Lebanon Iron Co. of Lebanon, Pa., has determined to rebuild the portion of its plant recently destroyed by fire.

Reports relative to the new silk mill at Scranton, Pa., are to the effect that it will be constructed by Klotz Bros. of 487 Broadway, New York.

The Metal Lacquer Co., recently organized in New Jersey, will have its offices at 763 Broad street, Newark. Charles H. Platt may be addressed.

The American Enamel & Stamping Co. is a corporation recently organized at Johnstown, Pa., with \$75,000 capital by A. W. Oberman and others.

Thomas S. Rogers of Helena, Mont., may be addressed relative to the Horseshoe Mining Co., which has been organized, with \$60,000 capital stock.

A company which includes Charles A. Sinclair of Portsmouth, N. H., has been formed with \$500,000 capital for coal-mining purposes in Pennsylvania.

The Cincinnati Milling Machine Co. of Cincinnati, Ohio, has purchased ground on which it is understood several additions to the plant will be made.

It is understood that the Slater Manufacturing Co. of Pawtucket, R. I., is considering the erection of another cotton mill in some town in that State.

A dispatch from York, Pa., announces that Messrs. Baugher, Kurtz & Co. have decided to build a machine shop which will be 100x80 feet in dimensions.

The Lawn Mower Sharpener Co. has been formed at Syracuse, N. Y., with \$50,000 to manufacture these instruments. M. R. Kenyon may be addressed.

The improvements to be made to the plant of the Waukesha Malleable Iron Works at Milwaukee, Wis., will include two ovens, also two additional buildings.

The Fairview Manufacturing Co., recently referred to in the Manufacturers' Record, may be addressed at Corning, Ill., and not Fairview, as recently reported.

The Commonwealth Company is considering the idea of removing its plant to Skowhegan, Maine. Negotiations are now under way with the town officials.

Charles Briggs of Calumet, Mich., is a director in the Lake Superior Development Co., formed for mining purposes in that city, with \$100,000 capital stock.

The New York Ornamental Brick Co. has been formed, with \$25,000 capital, to manufacture patent bricks at Bayonne, N. J. Henry R. Frey may be addressed.

W. H. Lauther of Pittsburg, Pa., who it is stated, is promoting a steel mill at Scottsdale, Pa., has secured an option on thirty-five acres of land for a site.

It is understood that Messrs. Crawley & Johnston of Cincinnati have decided to erect

a six-story building for their machinery business to be located on Main street.

A report is current that Messrs. A. G. Spaulding & Bros., of Chicago have determined to erect a plant for manufacturing bicycles and sporting goods generally.

The Phoenix Copper Co. has recently been formed at Phoenix, Mich., with \$2,500,000 capital. Cameron Currie and Louis H. Case of Detroit are directors in the company.

The Gallagher Oil Well Agitator Co. has been formed for the purpose of manufacturing special apparatus for oil wells. A. A. Lappe, at Allegheny, Pa., may be addressed.

The Mercury Gold Mining Co., organized with \$1,000,000 capital stock, will have its offices at Colorado Springs, Col. William C. Robinson of that city may be addressed.

Messrs. Van Zandt, Jacobs & Co. of Troy, N. Y., will erect a building 75x120 feet for manufacturing purposes. Contracts are about to be let for building, also machinery.

The Commercial Sash & Door Co. is a new Pittsburg corporation formed with \$100,000 capital to manufacture woodwork. J. H. May of Allegheny, Pa., is one of the directors.

The Snyder Manufacturing Co. of Little Falls, N. Y., will make a specialty of manufacturing knitting machinery, also bicycles. Titus Sheards of Little Falls may be addressed.

The Pullman Palace Car Co. of Chicago, it is understood, is considering the idea of introducing a system of fire extinguishers into its works, which will cost fully \$300,000.

The Morgan Engineering Co. of Alliance, Ohio, has let contracts for its additions, which will consist of an addition to the main erecting-room, also a crane shop with an annex.

According to a dispatch from Adams, Mass., the Berkshire Cotton Co. has determined to erect another cotton mill of a capacity of 100,000 spindles and to cost \$1,500,000.

Messrs. Scheeler's Sons of Buffalo, N. Y., are reported as about to erect a building 44x100 feet in dimensions for manufacturing wire and metal work. The building will cost \$15,000.

Joseph L. Wolcott of Dover, Del., may be addressed relative to the Sewing Machine Attachment Co., formed to manufacture sewing machines and special devices, with \$500,000 capital.

The government is preparing to build a factory for manufacturing rifles on its property at Rock Island, Ill. The superintendent of the Rock Island Arsenal will give further information.

The Leicester Mills Co., which recently purchased the plant of the Continental Mills at Germantown, Pa., will erect a new mill, it is reported, also a dyehouse, to be 100x40 feet in size.

D. D. Thorpe purchased the Frontier Iron Works at Detroit, Mich., at a recent sale by order of the court. It is understood he is acting for W. V. Moore, who will enlarge and operate the plant.

The National Steel Co. of Pittsburg, Pa., has purchased 717 acres of coal land near Uniontown, and it is understood will open a number of mines, also erect 600 coke ovens on the property.

Thomas Lowry of Minneapolis, Minn., is making arrangements to construct an office building in Minneapolis which will cost \$500,000. It will be used by the Chamber of Commerce of that city.

The Emerson Manufacturing Co. of Rockford, Ill., has let contracts for a factory and wood shop, but has not purchased all its machinery as yet. Ralph Emerson is president of the company.

D. R. Case of Bristol, R. I., and W. H. Harris of 229 Broadway, New York, are interested in the Metal Fabric Co. recently incorporated to manufacture metallic specialties with \$100,000 capital.

The Stanley Manufacturing Co. of Stanley, Wis., informs the Manufacturers' Record that it will rebuild its works, recently destroyed by fire. A mill and finishing-room will comprise the building; machinery will be needed.

The Self-Adjusting Weather Strip Co. of Boston, Mass., will erect one building for its present purpose. No contracts have been let as yet and machinery will be needed. Richard J. Kane at Lynn, Mass., may be addressed.

Edward Loth of Troy, N. Y., is architect for a storage warehouse to be erected for Quett, Peabody & Co., and a shirt factory for the International Shirt & Collar Co. in that city. All contracts for these buildings have been awarded.

The enlargement to the plant of the Castalia Cement Co. at Castalia, Ohio, will give it a capacity of 2000 barrels daily. The main building, it is understood, will be 400 feet long and seventy-five feet wide and contain six rotary kilns.

The Pneumatic Supply & Equipment Co., recently organized, intends installing compressed-air plants and will make a specialty of pneumatic rivet forges, compressors, etc. The company will have its offices at 20 Liberty street, New York.

F. K. Walker and others of Boston, Mass., are considering the idea of building a factory for manufacturing chainless bicycles at Winsted, Conn. The company has been formed under the title of the Universal Manufacturing Co., with \$150,000 capital.

M. S. and W. E. Marquis of New Castle, Pa., have purchased seventy-five acres of land near Beaver, Pa., on which they may possibly erect two blast furnaces which will have a combined output of 1000 tons of pig iron daily. A company is to be organized.

Relative to the Saylor Bridge Works at Pottstown, Pa., it is reported that the National Shipbuilding Co., which is now considering sites at Baltimore and on the Delaware river, intends to remove the plant and to operate it in connection with the proposed shipyard.

The Meissen China Pottery Co. of Tiffin, Ohio, intends erecting a building 30x75 feet in size. The plant will be operated by electricity, and it is said to be the first pottery of its kind in the United States to use the electric current as a motive power. All contracts have been let.

The Fellows Shaper Co. of Springfield, Vt., informs the Manufacturers' Record that it will erect an addition to its present plant to be 94x45 feet. Contracts for building and machinery will be let at once; water-power is used. W. D. Woolson is president of the company.

The Page Woven Wire Fence Co. of Adrian, Mich., writes the Manufacturers' Record that for the present one building will be erected at Monessen, Pa. It will be about 500 feet long and 800 horse-power will be used. It will turn out about seventy-five tons of wire daily. J. Wallace Page is president of the company.

The United States Flour Manufacturing Co., which is the company controlling a number of the principal mills at Minneapolis, Minn., it is stated has decided to increase the capacity of those in the city to 10,000 barrels daily. There is a possibility that an additional mill will also be erected. The company may be addressed at Minneapolis.

TRADE NOTES.

Core-oven Carriages.—Two or three iron carriages for core ovens, suitable for the heaviest work, are offered for sale by the Bridgeport (Conn.) Deodorized Bronze & Metal Co.

Wants to Rent Flat Cars.—Messrs. Abercrombie & Williamson of Barnwell, S. C., will pay double rent for twelve flat cars for sixty days in railroad construction in South Carolina.

Electric-lighting Plant.—Messrs. A. N. Palmer & Co. of 219 East Baltimore street, Baltimore, Md., have received contract to install an electric-lighting plant at Portsmouth, Va.

Lumber Business Improving.—The E. D. Albro Company of Cincinnati says that it is glad to report a steady improvement in business, not only as to the volume, but prices are better and lumber and kindred lines will certainly be satisfactory this year.

Mr. Jesse Garrett Dead.—Messrs. R. D. Wood & Co. of Philadelphia announce, with regret, the death at Bar Harbor, Me., April 27, of Mr. Jesse Garrett, who has been their representative for many years. The many friends of Mr. Garrett and his firm will share the regret of Messrs. Wood & Co.

Griffing Iron Co.'s Notice.—On May 2 the A. A. Griffing Iron Co. of Jersey City, N. J., held its annual meeting. Notice is given the trade that the following officers were elected: President, E. F. C. Young; vice-president and general manager, Thos. H. Williams, and secretary-treasurer, Isaac C. Ogden.

Textile Mills for Sale.—The Porter Manufacturing Co. of Habersham county, Georgia, is offering for sale its entire properties. The plant includes a valuable water-power, 600 acres of land, a woolen mill, a cotton mill, residences, operatives' houses, store, warehouses, etc. For particulars address T. D.

Meador, president, Atlanta, Ga. (or see advertisement).

Lumber Mill for Sale.—A valuable sawmill property will be offered at public auction on May 17 at Darien, Ga. The mill includes 277 acres of land, complete equipment of machinery, artesian well, deep loading berth for vessels, etc. Address McDonald Dunwoody, agent for the owner (or see advertisement).

A Southern Opportunity.—The South is now offering unusual advantages in all lines. Men of energy, with a little capital, soon amass competences and frequently fortunes. "An Opportunity for a Live Vehicle Man" in this issue will, no doubt, bring many responses. See advertisement of, or write to, Box 756, care of Manufacturers' Record.

Ball Engines.—The Ball Engine Co. of Erie, Pa., has furnished the following engines lately: One for electric service in watch works at Elgin, Ill.; a 100-horse-power engine for direct connection to a Westinghouse generator at Chicago; engine for direct connection to a Western Electric generator at Chicago, and engine for direct connection to Westinghouse generator in public school at Philadelphia.

Ball Engines.—The Ball Engine Co. of Erie, Pa., continues to receive many orders for its popular engines. Recent contracts call for two 60-horse-power and one 100-horse-power engine for direct connection to generators; a 175-horse-power compound for direct connection; engine for direct connection at Evansville, Ind.; two engines for direct connection at Philadelphia, and a number of foreign orders for shipment to Russia, Japan, Mexico and Venezuela.

Wolf Flour Mills.—The Wolf Company of Chambersburg, Pa., has filed since last report orders for a 60-barrel flour mill at Summerville, N. C.; a 400-barrel mill at Enterprise, Kan.; 50-barrel mill at Mt. Airy, N. C.; 40-barrel mill at McKenzie, Tenn.; 50-barrel mill at Bridgeville, Del., and to remodel mills of seventy-five barrels and fifty barrels capacity at Sharon, Tenn., and Milton, Mo. These mills will each have the Wolf Company's gyrator system installed.

An Extensive Drilling Record.—Messrs. John Mulhead & Son of Pittsburg, Pa., state that their contracts for drilling since 1869 amount to 360,000 feet, or fifty-six miles of drilling. Of this amount, 54,000 feet was for one firm in Pennsylvania, 48,000 for another firm in same State, the balance was throughout the entire country. The Messrs. Mulhead have recently secured the sole agency for Pennsylvania from the M. C. Bullock Manufacturing Co. of Chicago, manufacturer of diamond-core drills and prospecting-core supplies.

Acetylene Gas for House Lighting.—There is a lively demand for "Criterion" acetylene gas generators for the lighting of private residences, and the manufacturers, J. B. Colt & Co., 3-5-7 West Twenty-ninth street, New York, report recent orders for some unusually large machines. They have just sold a 100-light acetylene-gas plant (No. 35, Model A) generator to A. A. Anderson of Greenwich, Conn., which will be used for lighting residence; they also report having recently made an extensive shipment of house-lighting generators for export.

Returning Good Times.—Another indication that prosperity is returning and business increasing in the woodworking-machinery line, as well as all others, has been demonstrated by the J. A. Fay & Egan Co., which claims to be the largest manufacturer of all kinds of machinery for working wood in the world, with works in Cincinnati, Ohio. The company is erecting a large addition to its plant and equipping it with the latest-improved tools; not only this, but on May 1 the wages of its employees were raised 10 per cent. without solicitation from the men. We believe this is a good witness of returning good times.

Tower-Binford Company.—An important movement in the industrial world of the South is that of the incorporation of the Tower-Binford Electric & Manufacturing Co. at Richmond, Va. The company succeeds the Tower-Binford Electric Co., and will continue to conduct a general electrical business as contractor, manufacturer and supply dealer. The new company has a paid-up capital of \$30,000, and authority to increase to \$100,000. Mr. P. H. Mayo, one of the best-known financiers and manufacturers of Richmond, has become connected with the enterprise, and will be its president, and Mr. Julien Binford, Jr., will act as secretary.

Lubricating Engines.—Very particular engineers annoyed by using oil for lubricating

purposes will find a welcome change in the engine-room if they apply Albany grease and will send to Adam Cook's Sons, 313 West street, New York, for a sample can and try it on the crank pins of the engine or engines in use. The firm make a standing offer to furnish a sufficient quantity of their compound and an Albany grease cup free of charge or expense to all engineers who desire to test the matter. Aside from the extra cleanliness obtained in the use of this standard lubricant, the saving in dollars and cents in the oil bill is a substantial one, and well worthy of investigation.

Mechanical Draft in Mexico, etc.—The outfit recently shipped to Mexico included two fans that were as large as any ever built and without doubt the largest, if not the first, ever used in the Southern republic. Warren & Co.'s paper factory power plant in Maine also included fans of the same size. An outfit to be shipped to Johannesburg, Africa, calls for two fans of nearly the same proportions as those mentioned above. Mechanical-induced draft is being introduced into all sections of the world, and its adaptability for all grades of coal of different countries is being demonstrated with each succeeding installation. These fans are the product of the Buffalo (N. Y.) Forge Co.

Adding a Foundry.—The Valley Iron Works, Williamsport, Pa., is erecting a new and complete foundry; buildings will be one-story brick, 55x165 feet, with same character additions for fan and engine rooms, casting-cleaning room, rattler room, cupola house and core ovens. Plant is to be supplied with two cupolas, stock elevator and traveling crane, the latter to be operated by compressed air, as will be the several special molding machines to be installed. This is to be one of the most modern and up-to-date plants in the country, and will be equipped with every known labor-saving appliance to expedite work and produce cheaply, and among which is to be a Pennsylvania Railroad switch entering center of building on side, admitting of castings being loaded without removing from shop.

Valuable Water-power and Milling Property.—On Monday, June 5, there will be sold at public offering in North Carolina a valuable water-power and milling property. The property consists of land on both sides of the Neuse river at the Falls of Neuse in Wake county, together with improvements thereon. The improvements include a complete paper mill, 100-horse-power engine, 100-horse-power boiler, 80-horse-power engine, 68-inch Foudrinier paper machine, Marshall drying train complete with shafting, 40-horse-power boiler, 42-inch water-wheel, etc. The property includes one of the best and most available water-powers in the State, and the whole offers a most attractive investment. Power for operating a number of industries could be developed. For particulars address Chas. H. Belvin, commissioner of the court, Raleigh, N. C.

Cochrane Feed-water Heaters and Purifiers, etc.—Recent sales of the heaters and purifiers mentioned were made as follows: At Midvale, Pa., 3000 horse-power; Chicago, 300 horse-power; Peoria, Ill., 600 horse-power; Boston, 300 horse-power and 150 horse-power; Chicago, 700 horse-power; Granite City, Ill., 3000 horse-power; St. Louis, 300 horse-power; La Salle, Ill., 1000 horse-power; Philadelphia, 450 horse-power; Boscobel, Wis., 150 horse-power; Tennessee, two 150 horse-power; Amsterdam, Holland, 200 horse-power; Scranton, Pa., 5000 horse-power. For the Cochrane separators orders came from Wadsworth, Ohio, two eight-inch; Fitchburg, Mass., one four-inch and one six-inch; Peoria, two seven-inch; Boston, two nine-inch receiver separators; Iowa City, seven-inch; Lorain, six-inch receiver; St. Louis, one three-and-one-half-inch and one four-inch, one 12-inch and two 10-inch; Schenectady, one seven-inch; San Francisco, one eight-inch; Keokuk, Iowa, one four-and-one-half-inch and two eight-inch; Gloucester, N. J., one eight-inch receiver; blast furnaces, one nine-inch and two eight-inch; London, England, one six-inch; St. Louis, one six-inch; Buckeye, two four-and-one-half-inch; Midvale, one four-inch, one four-and-one-half-inch, one five-inch and one six-inch; Philadelphia, two four-inch and one 12-inch; Middleton Paper Co., one five-inch; Boston, one seven-inch; Roxborough, Chestnut Hill & Norristown Railway, one 12-inch, etc.; also separators for United States steamships "Isle de Louzon," "Don Juan de Austria," "Isle de Cuba." The Harrison Safety Boiler Works of Philadelphia make these popular devices.

Harlan & Hollingsworth.—The Harlan & Hollingsworth Co. of Wilmington, Del., has contracted with New York & Baltimore

Transportation Line for two freight steamships, 219 feet over all, 205 feet perpendiculars, thirty-two feet beam molded, depth to upper deck twenty-three feet six inches, to carry 900 tons on thirteen feet six inches draft, four water-tight bulkheads, three side ports on each side, steel deckhouse and two wooden masts, electric-lighting plant of 100 16-candle-power lights, one 500 and one 1000-gallon tank, triple-expansion engine 18, 28, 45 by 30-inch stroke, and two Scotch boilers eleven feet diameter, ten feet six inches long, and to make a speed of twelve knots loaded. The company expects to launch the torpedo-boat destroyer Stringham this month; will launch the Maracabo for the Red D Line in June, followed by the Ponce for the New York & Porto Rico Steamship Co. in July. Work on the latter's sister ship, the San Juan, is being pushed rapidly, and she will shortly follow, all three of these ships being under the supervision of Mr. John Haug. Winsor ship No. 4 is progressing, and the torpedo-boat destroyers Nos. 6 and 7, Hopkins and Hull, are well in frame. The steamship Nantucket of the Merchant & Miners' Transportation Co. will have her trial trip and delivery this month. Owing to the liberal appropriation of the last Congress, the Christiana river will be greatly widened and deepened; in fact, it will have a uniform depth of twenty-four feet at mean low water, and will enable ships of any size to be built on its banks. The Harlan & Hollingsworth Co. contemplates building a 600-foot ways to accommodate the building of the largest steamers. During the past year the company has made a number of improvements to the plant, many new tools have been added and now claims to be probably better equipped to turn out quick work than any shipyard in the country.

TRADE LITERATURE.

Things Acetylene.—Three booklets have been issued by Messrs. F. Cortez Wilson & Co. that are calculated to be of much interest to anyone having to do with acetylene and its various uses. The booklets referred to are named respectively "Acetylene Dealers' Hand-Book," "Authorities on Acetylene Gas" and "Acetylene Gas and Apparatus—The Acetylogen." Messrs. Wilson & Co. are of 237 Lake street, Chicago, where they manufacture the "Acetylogen" apparatus mentioned in above and will supply copies of their booklets to those interested.

Foundry-Supply Catalogue.—Equipment Catalogue No. 1 is intended to give the trade an idea of the latest improvements and labor-saving devices connected with a modern and up-to-date foundry. The S. Obermayer Co. of Chicago and Cincinnati issues this catalogue and informs those interested that it can figure on all and everything needed in a brass, iron or steel foundry, its cupolas, cranes, ladles, tumbling mills, etc., being of the latest improved patterns that skill and experienced manufacture can produce. Plans and equipment complete for foundries can be supplied by the company.

Booklet of Pumping Machinery.—The cover of this booklet is of a very unique design. The scene is a fine imitation of a photograph showing a pumping outfit on the summit of a mountain region pumping water to the sun from the earth. Further, it may be said that the John H. McGowan Co. of Cincinnati issues the booklet, but the contents only treats of those designs for which there is current demand and not by any means of the entire line this company manufactures. In addition to the pumps mentioned, the McGowan Company is supplying combinations of types for large capacities and high ranges of pressure. Estimates, blue-prints, etc., furnished promptly.

Planished Sheet Iron.—The W. Dewees Wood Co., manufacturer of the well-known patent planished sheet iron, smooth black sheet iron and patent planished locomotive jacket iron, will issue an edition de luxe illustrating and describing, with considerable attention to detail, its works and methods of manufacture. From the initial process of cutting wood for charcoal pits to the final delivery of the finished product in the warehouses of the company the various processes will be illustrated and described in sequence. The Chasmar-Winchell Press of New York will print the brochure, and instructions are to spare no effort in producing as handsome a work as is possible. The work will be ready for mailing by May 1, and as the edition is to be 50,000 copies, it will be possible to remember the trade everywhere.

The third annual meeting of the Foundrymen's Association will be held in Pittsburg, May 16 to 19.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

A savings bank has been organized at Union Bridge, Md., with \$20,000 capital. Jacob Stoner is president.

Walter Miller of Fairmont, W. Va., is one of the incorporators of the Fairmont Investment Co., recently formed with \$100,000 capital.

The Bank of Giles has been formed at Pearisburg, Va., with \$20,000 capital. P. F. St. Clair is president; W. J. Henson, vice-president, and C. L. King, cashier.

The Atlanta County Bank Stock Association of Atlanta, Ga., has formed a branch at Villa Rica, Ga., with \$25,000 capital stock. W. D. Candler is one of those interested.

What is to be known as the Cotton Ginners' Protective Association is being organized at Meridian, Miss., on the plan of a co-operative insurance company. It is intended to insure ginners against fire losses. G. W. Soule is among those interested.

New Securities.

A bill is pending in the Florida senate authorizing the sale of \$1,000,000 in bonds for refunding purposes.

The city of Durham, N. C., has voted in favor of issuing bonds for school purposes. Address the mayor.

The town of Sanford, N. C., has voted in favor of issuing bonds for improvements. Address the mayor.

John W. Dickey of Augusta, Ga., has purchased \$45,000 in city 3½ per cent. bonds, paying 101 for them.

An election will be held May 20 at Valdosta, Ga., to decide the question of placing \$35,000 in bonds on the market.

Messrs. Rudolph Kleybolt & Co. of Cincinnati, Ohio, have purchased \$22,000 in 4½ per cent. bonds of Newberry, S. C.

The city council of Nashville, Tenn., is considering the bill authorizing the sale of \$50,000 in bonds for refunding purposes.

The sinking fund commission of Atlanta, Ga., has purchased \$52,000 worth of city bonds on an interest basis of 3.45 per cent.

The city of Athens, Ga., has sold \$100,000 worth of 4 per cent. bonds to W. J. Hayes & Sons of Philadelphia at a premium of \$5171.

The commissioners of Wake county, North Carolina, have determined to issue about \$8000 in bonds for bridges. The board may be addressed at Raleigh.

The issue of \$35,000 in bonds of Cullman, Ala., may be sold at private sale, as the bids which have been received have been rejected. W. H. Jones is city clerk.

W. H. Worth, State treasurer at Raleigh, N. C., will receive bids until May 22 for the issue of \$110,000 in 4 per cent. bonds to be issued for refunding purposes.

Waynesville, N. C., will probably sell bonds for improvements in the near future, as a vote has been taken in favor of the issue. The town clerk may be addressed.

John B. Driver of Osceola, Ark., may be addressed relative to the proposed issue of \$750,000 in bonds for levee improvements. The bonds will bear 5 per cent. interest.

The Fraternal Trust Co. of Baltimore has determined to increase its capital from \$100,000 to \$200,000, and has elected the following officers: Charles O'Don-

nell Lee, president; William F. Wheatley, Louis Reitz and Jno. D. Blake, vice-presidents; Frank J. Kohler, secretary and treasurer.

Messrs. W. J. Hayes & Sons of Cleveland, Ohio, have purchased the issue of 6 per cent. bonds of Forsyth, Ga., recently placed on the market. The price paid was 116.

The people of Wadesboro township, North Carolina, have voted to sell \$25,000 in bonds for road improvements. The board of commissioners may be addressed at Wadesboro.

The town of Rocky Mount, N. C., will probably place an issue of \$40,000 in bonds for water-works purposes on the market in the near future. The town clerk will give further information.

Financial Notes.

The Twin City Loan Association of Norfolk, Va., at its recent annual meeting elected James O'Rourke, president; B. A. Richardson, vice-president; A. W. Long, treasurer, and George W. White, secretary.

Recent changes among bank officials in the South are as follows: National Bank of the State of Florida, Jacksonville, Fla., Henry B. Tompkins, president. Citizens' National Bank, Navasota, Texas, J. W. Rodes, vice-president.

The next meeting of the Texas Real Estate Association will be held at Waco on June 13 and 14. It is believed that a large delegation will be present, as much interest is manifested in the work of this association in the Southwest. C. S. Penfield, president of the association, is also chairman of the immigration committee of the Business League at Houston.

The Business Men's League of Atlanta is planning to organize a merchants' association to encourage trading with the wholesale merchants of Atlanta.

The assessors' reports for the State of Arkansas indicate that the taxable property this year amounts to \$1,000,000 more than the preceding year.

The Louise Mills of Charlotte, N. C., is circulating an interesting brochure by Mr. D. A. Tompkins of that city on road building and broad tires.

The Pennsylvania Railroad's New Passenger Cars.

The Pennsylvania Railroad Co. has just placed in service on its principal through trains between New York and Washington and New York and Pittsburg a number of new passenger coaches and combined cars with the latest pattern of wide platform and vestibule. These vestibules, which have been such a prominent feature of the new Pennsylvania and Congressional Limiteds, are the entire width of the cars, and with their large plate-glass doors and windows form excellent observation nooks, besides rendering passage from car to car easy and absolutely safe and comfortable. A train of cars equipped with this improved device has the appearance, and all the actual advantages, of one elongated coach.

The passenger coaches of the Pennsylvania Railroad have long been noted for their comfort and cheerfulness, and the introduction of this new vestibule adds one more appreciable improvement. It marks the constant disposition on the part of the Pennsylvania Railroad Co. to provide for its patrons all the conveniences which a ripe experience can suggest.

Most of these new cars are also provided with lavatories, and equipped with a very successful and satisfactory patent window shade.

San Antonio, Texas, desires and will take stock in a cotton factory, woolen mill, leather products or cannery. Experienced and responsible parties (and no others) can get full information by writing the Business Men's Club of that city.

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Washington Peace Jubilee—Reduced Rates via Pennsylvania Railroad.

On account of the National Peace Jubilee, to be held at Washington, D. C. May 23, 24 and 25, the Pennsylvania Railroad Co. has arranged to sell round-trip tickets on May 22 and 23, good to return, when validated by agent at Washington, within ten days from date of sale, at rate of \$2 from Baltimore, and corresponding rates from intermediate points.

Reduced Rates to San Francisco via Pennsylvania Railroad, Account Baptist National Anniversaries.

On account of the Baptist National Anniversaries at San Francisco, the Pennsylvania Railroad Co. will sell excursion tickets from stations on its line to San Francisco May 14, 15 and 16, good to return until July 16, at rate of single fare for the round trip.

For specific rates and detailed information apply to ticket agents.